NAD SERVICE MANUAL

MONITOR SERIES

6300

CASSETTE DECK

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SPECIFICATION

Cassette mechanism: Full logic direct drive closed-loop dual capstan 3 head system

Tack system: 4-track, 2-channel stereo

Mechanical Performances

		Unit
Tape speed	4.75	cm/sec
Wow and flutter		
PLAYBACK (JIS WRMS)	0.025	%
Pressure roller force	360	g
Play torque	35 ~ 55	g/cm
F.F torque	70 MIN.	g/cm
REW torque	70 MIN.	g/cm
F.F time (C-60)	90	sec
REW time (C-60)	90	sec
Back tension (PLAYBACK)	6 ~ 10	g

Electrical Performances

	Nominal	Limit	Unit
Input sens./impedance			
(to Dolby level)	40 ±1 dB/10		mV/kΩ
Frequency response PLAYBACK	40 – 18k		Hz
Frequency response REC/PLAY			
(at Dolby level −25 dB, Dolby NR:OFF)			
TYPE I	30 – 18k		Hz
TYPE II	30 – 20k		Hz
TYPE IV	30 – 20k		Hz
Signal to noise ratio at Dolby level, Dolby NR:OFF			
(CCIR ARM weighted / 20 – 20k Hz B.P.F)			
TYPE I No tape	57.2/52.0	55.2/49.0	dB
Virgin tape	53.5/51.0	51.5/48.5	dB
Biased tape	49.6/50.0	47.6/47.0	dB
TYPE II, IV No tape	61.1/54.0	59.1/51.0	dB
Virgin tape	56.0/53.5	54.0/51.0	dB
Biased tape	51.3/52.0	49.0/49.0	dB

	Nominal	Limit	Unit
Dolby NR effect			
(CCIR ARM at Dolby level)			
Dolby NR B	10	9	dB
Dolby NR C	20	18	dB
Erase effect (with 1 kHz B.P.F)			
0 VU + 10 dB input	70	65	dB
Separation (with 1 kHz B.P.F) REC/PLAY			
Dolby level input at 1 kHz	45	40	dB
Cross talk at 1 kHz (with 1 kHz B.P.F)			
0 VU + 10 dB input	70	65	dB
Output level at Dolby level			
MTT-150 PLAY	505	505 ±1 dB	mV
Distortion (at Dolby level 1 kHz)			
TYPE I	0.8	1.8	%
TYPE II	2.0	3.2	%
TYPE IV	1.0	2.5	%
Transmission distance of remote control			
at directly	7	10	m
Compress effect (boost ratio) at Dolby level −40 dB			
30 Hz	+21	+19/+23	dB
1 kHz	+12	+10/+14	dB
20 kHz	+16	+14/+18	dB

General

		Unit
Power supply	110/120/220/240	V
	50/60	Hz
Power consumption	35	W
Dimensions(W/D/H)		
(include knob and leg)	435/271/122	mm
Net weight	5.9	kg

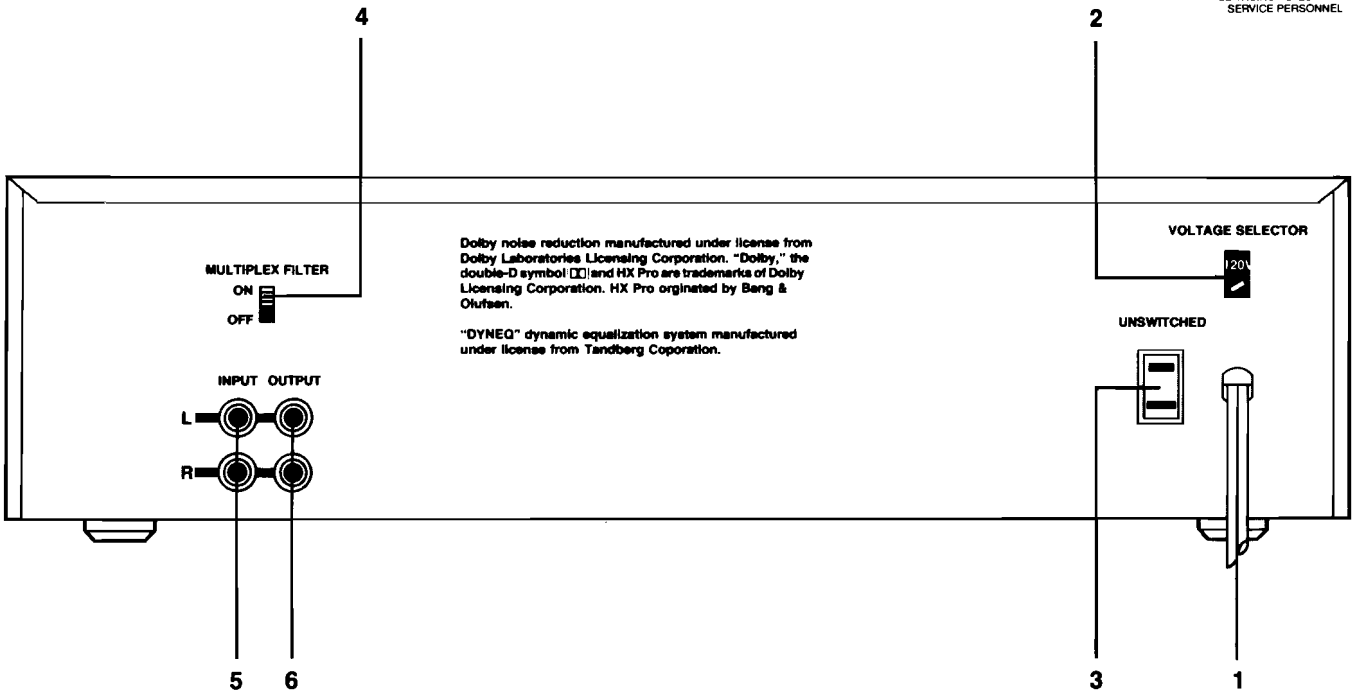
The specifications are subject to change without prior notice.

REAR PANEL

1. AC Power Cord.
2. Voltage Selector.
3. Accessory AC Outlet.
4. Multiplex Filter.
5. Line Input.
6. Line Output.

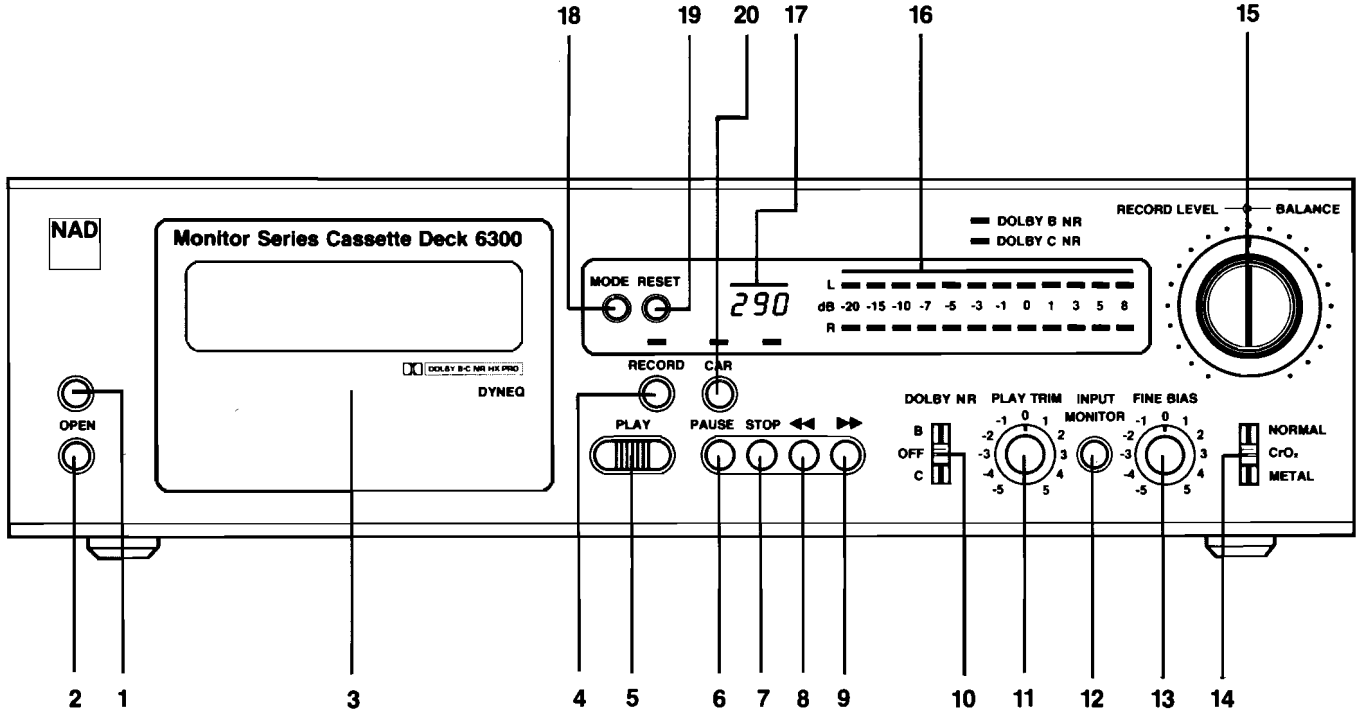
CAUTION

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL



FRONT PANEL

1. Power.
2. Open.
3. Cassette Compartment.
4. Record.
5. Play.
6. Pause.
7. Stop.
8. Rewind (◀◀).
9. Fast Forward (▶▶).
10. Dolby NR.
11. Play Trim.
12. Input Monitor.
13. Fine Bias.
14. Tape Selector.
15. Recording Level/Balance.
16. Recording Level Display.
17. Tape Counter/Timer.
18. Mode (Clock/Count).
19. Reset.
20. CAR Processor.



ALIGNMENT METHOD

IMPORTANT

The tape path (heads, tape guides, capstan, pinch roller) should be cleaned and degaussed before alignment.

This tape recorder is designed to work well with a variety of tapes, however, maximum performance will be obtained with recommended tapes or similar tape formulations.

Recommended tapes	For North America	For Europe-DIN
Type I	Maxell UDS-I	Maxell UD-I, BASF TP18 no, R723DG
Type II	Maxell XL-II	Maxell XL-II, Teac MTT-5561
Type IV	Maxell MX	Maxell MX, Maxell MX 422

All adjustments done with Dolby NR OFF, MPX filter (on back panel) OFF and BIAS FINE ADJUST in center position.

DOLBY NR level 200 nWb/m = 245 mV RMS on testpoints TP001(L) and TP002(R)/TP003(L) and TP004(R) (PLAYBACK/RECORDING) on Main PCB; approximately 505 mV at line outputs.

1. TAPE SPEED
Connect one output to Wow and Flutter Meter or Frequency Counter, Play speed test tape TEAC MTT-111 = 3 kHz or TEAC MTT-211 = 3.15 kHz and adjust SVR851, for correct reading on Wow and Flutter Meter or Frequency Counter.(See Fig. A)

Tolerance: ±1%

2. AZIMUTH
Connect VTVM's and/or Oscilloscope to outputs. Set tape selector to normal and start playing Azimuth tape TEAC MTT-113 or MTT-114. Rotate azimuth screw for maximum output and/or maximum and in phase on Oscilloscope. Reseal adjustment screw with nail polish or similar (do not use glue).(See Fig. B)

3. PLAYBACK EQ
THIS ADJUSTMENT IS NOT NEEDED UNLESS THE HEAD HAS BEEN REPLACED OR REPAIR HAS BEEN DONE IN HEADAMP CIRCUIT.

Play level/azimuth tape TEAC MTT-256 and adjust SVR001(L) and SVR002(R) for identical output at 315/6300 Hz (MTT-255) or 250/6300 Hz (MTT-256).

Tolerance: ±0.5 dB

4. PLAYBACK HIGH FREQUENCY EQ
THIS ADJUSTMENT SHOULD BE DONE ONLY WHEN HEAD HAS BEEN REPLACED.

Play frequency response tape TEAC MTT-256 or MTT-256U and check playback level at 14 kHz.
Before adjust, cut the center of jumper leads E001(L) and E002(R). Adjust by disconnecting R001(L) and R002(R) if 14 kHz is too low and connecting E001(L) and E002(R) if 14 kHz is too high. Leave same component values in both channels.

Tolerance: ±1 dB

5. PLAYBACK LEVEL
Connect VTVM to testpoints. Play Dolby NR level tape TEAC MTT-150 and adjust SVR003(L) and SVR004(R) for 245 mV RMS at testpoint TP001(L) and TP002(R) on Main PCB.

Tolerance: ±2.5 mV RMS

Output should be approximately 505 mV RMS.

6. METER LEVEL
Play Dolby NR level tape MTT-150 and adjust SVR501(L) and SVR502(R) so that 0 dB LED's just turn on.

7. BIAS TRAP
Insert a blank type I tape and start recording. Turn record level all the way down and set tape selector to type IV position. Connect VTVM's and/or oscilloscope probe to testpoint MP201-3(L) and adjust F301 for minimum. Connect probe to MP201-1 and adjust F302 for minimum.

Tolerance: Less than 300 mV RMS.

8. RECORD LEVEL
Set tape selector to type IV tape. Connect audio oscillator to line inputs, turn record levels to maximum (clockwise). Adjust audio oscillator frequency to 400 Hz and output so that VTVM's read 30 – 40 mV. (Use a convenient reference point on the VTVM's).

Reset tape counter to 0 and release pause to start recording. Record for approximately 5 seconds, rewind to 0 on tape counter and play back while observing the VTVM's. The VTVM's should indicate the same level as when the tape was recorded. Adjust SVR005(L) and SVR006(R) if necessary and repeat the record / play procedure until the readings are the same.

Tolerance: ±0.5 dB from record level. Less than 0.5 dB difference between channels.

9. BIAS ADJUST TYPE I TAPE (NORMAL)
Set audio generator to 1.2 kHz without changing output level. Reset tape counter to 0 and start recording. After 5 seconds change audio generator frequency to 12 kHz (do not stop the machine or change levels) and continue recording for another 5 seconds. Stop and rewind to 0 on tape counter. Play back while observing VTVM's. There should be no level difference between the 1.2 kHz and the 12 kHz tone when played back. If 12 kHz is different in level for 1.2 kHz, adjust SVR301(L) and SVR302(R) and repeat the record / play procedure until both frequencies play back at same level.

Tolerance: ±0.5 dB

WARNING: Greater tolerance will grossly affect the Dolby NR tracking and especially the Dolby C tracking.

Record level (step 8) should be checked and if necessary adjusted.

10. PEAKING CIRCUIT TYPE I TAPE (NORMAL)

Adjust audio generator to 18 kHz while maintaining the same output level. Record and play back the 18 kHz tone and adjust SVR201(L) and SVR202(R) to the same level as the 1.2 kHz signal.

Tolerance: ±1 dB

WARNING: If the R/P head is worn, the tape may not have adequate contact with the head, resulting in severe drop outs. A worn head will make this adjustment very difficult or impossible. DO NOT try to adjust the worn R/P head. Leave SVR201 and SVR202 in the factory preset condition, or if they have already been adjusted, readjust them to their approximate midposition.

11. FREQUENCY RESPONSE TYPE II TAPE (CrO2)

Insert a type II tape and set selector to type II position. Adjust audio generator to 1.2 kHz and 12 kHz and repeat process described in step 9 using SVR303(L) and SVR304(R) to adjust both channel simultaneously. After 1.2 kHz and 12 kHz are adjusted properly, set audio generator to 20 kHz and repeat same process as described in step 10 while adjusting SVR203(L) and SVR204(R) to obtain correct reading.

12. FREQUENCY RESPONSE TYPE IV TAPE (METAL)

Insert a type IV tape and set selector to type IV position. Repeat procedure as in step 9 while adjusting SVR305(L) and SVR306(R) for correct 12 kHz level in both channels. Set audio generator to 20 kHz and repeat process as in step 10 while adjusting SVR205(L) and SVR206(R) for correct 20 kHz record level.

13. DYNEQ

Engage record and pause mode. Adjust audio generator to 14 kHz and output so that tape recorder output is −5 dB from Dolby NR level (approximately 280 mV RMS). Set tape selector to type I position and connect VTVM probe to test point MP201-3(L) (nearest rear panel) and adjust SVR207 from fully counter-clockwise position until the output on the probe decreases 1 dB.

Connect VTVM probe to test point MP201-1(R) (nearest to front panel) and adjust SVR208 from fully counter-clockwise position until the output probe decreases 1 dB.

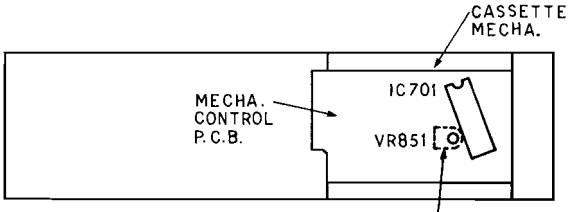
14. CAR

INPUT MONITOR is in position, frequency 1 kHz SIGNAL to LINE INPUT. Adjust S.G. output so that voltage at TP003, TP004 are 22 mV. CAR is IN position, adjust SVR101 and SVR102 to increase 6.0 dB at TP003, TP004.

Tolerance: ±0.5 dB

ALIGNMENT COMPONENTS LAYOUT

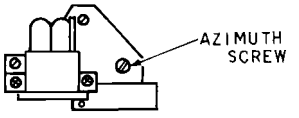
Fig. A FOR ADJUSTING TAPE SPEED



FRONT PANEL from rear side

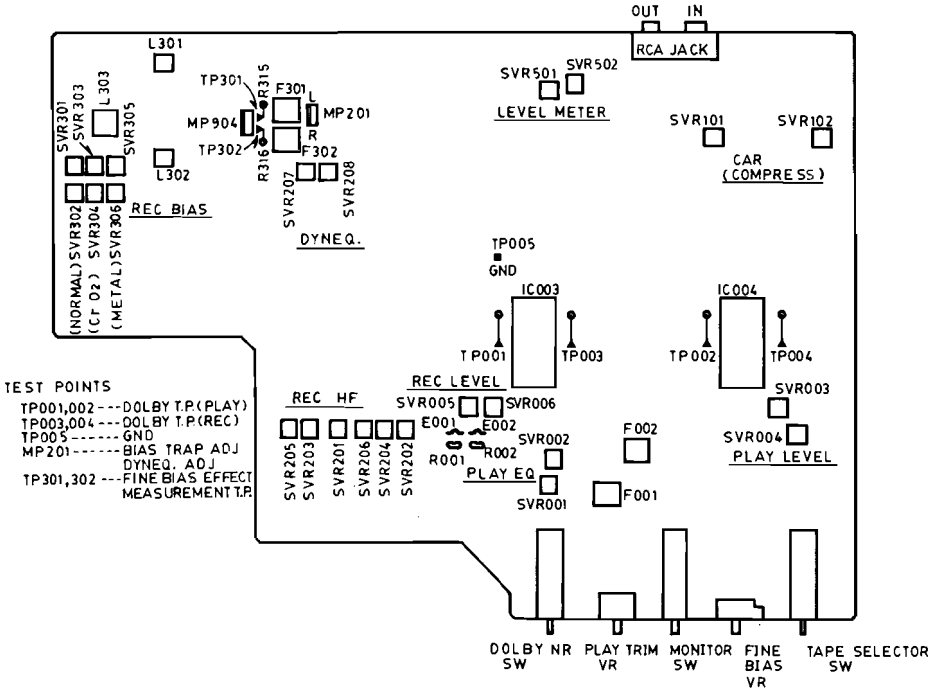
Adjust the semi-variable resistor (SVR851) on the capstan motor PCB through this hole.

Fig. B FOR ADJUSTING AZIMUTH

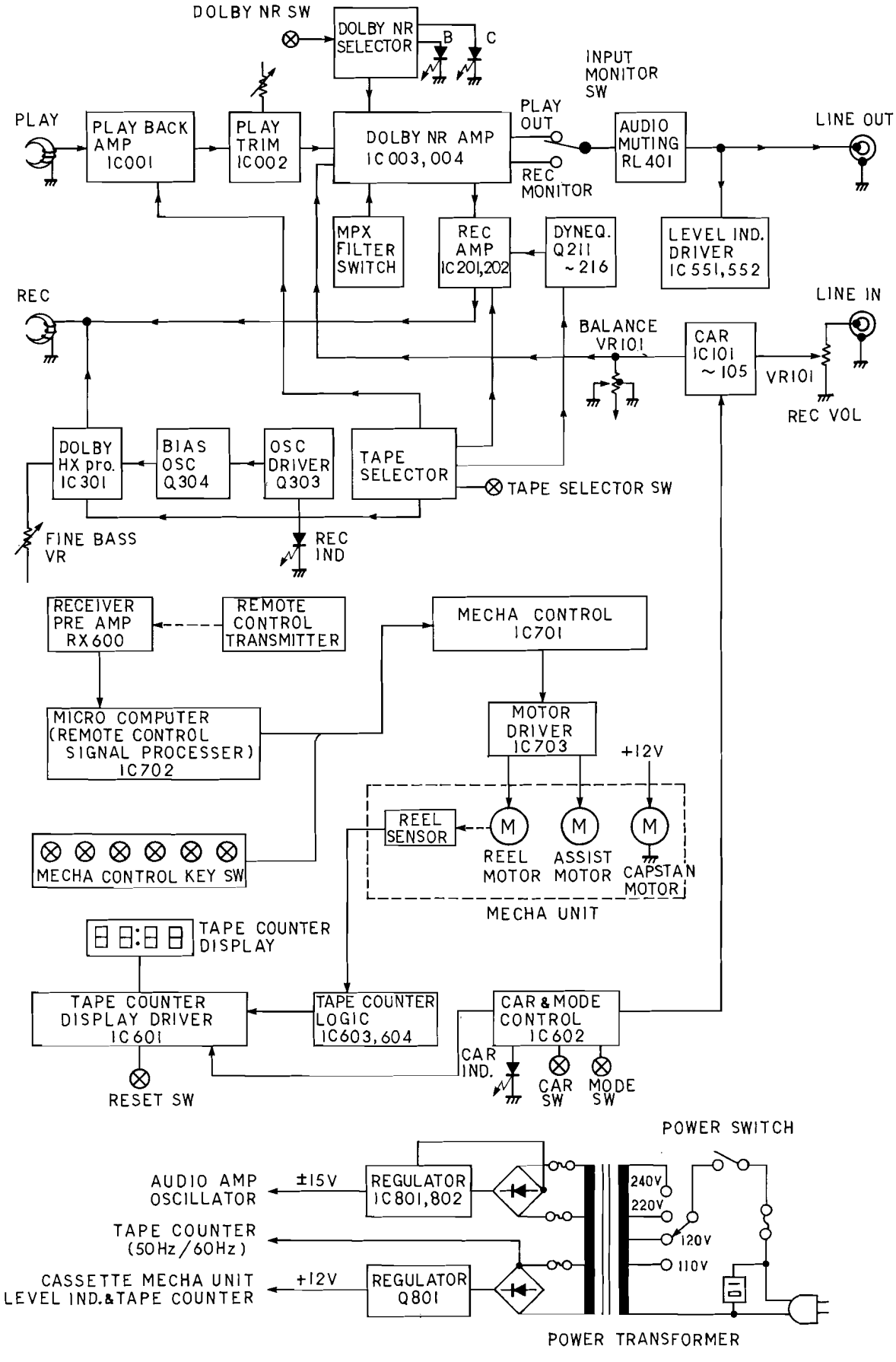


R/P HEAD FRONT VIEW

Fig. C MAIN PCB

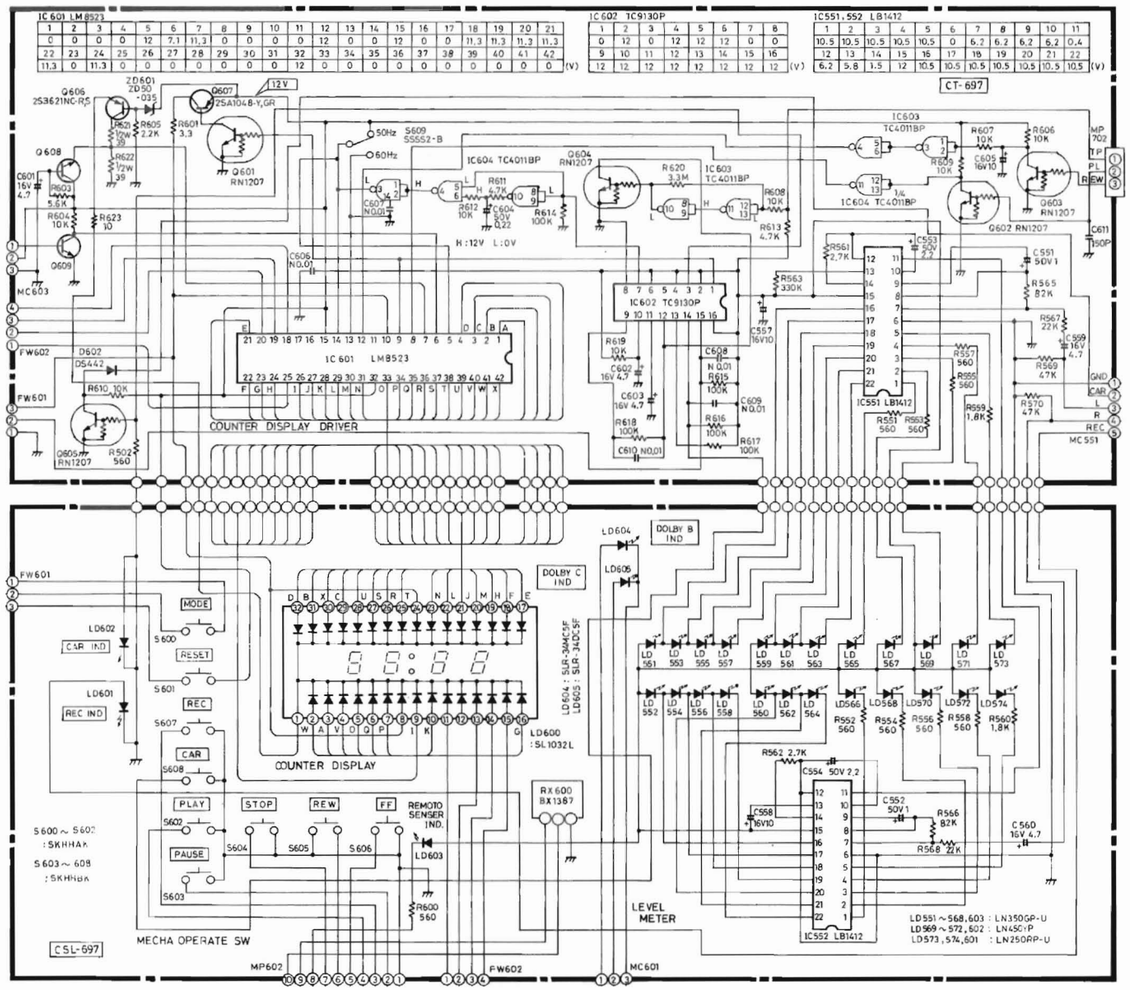


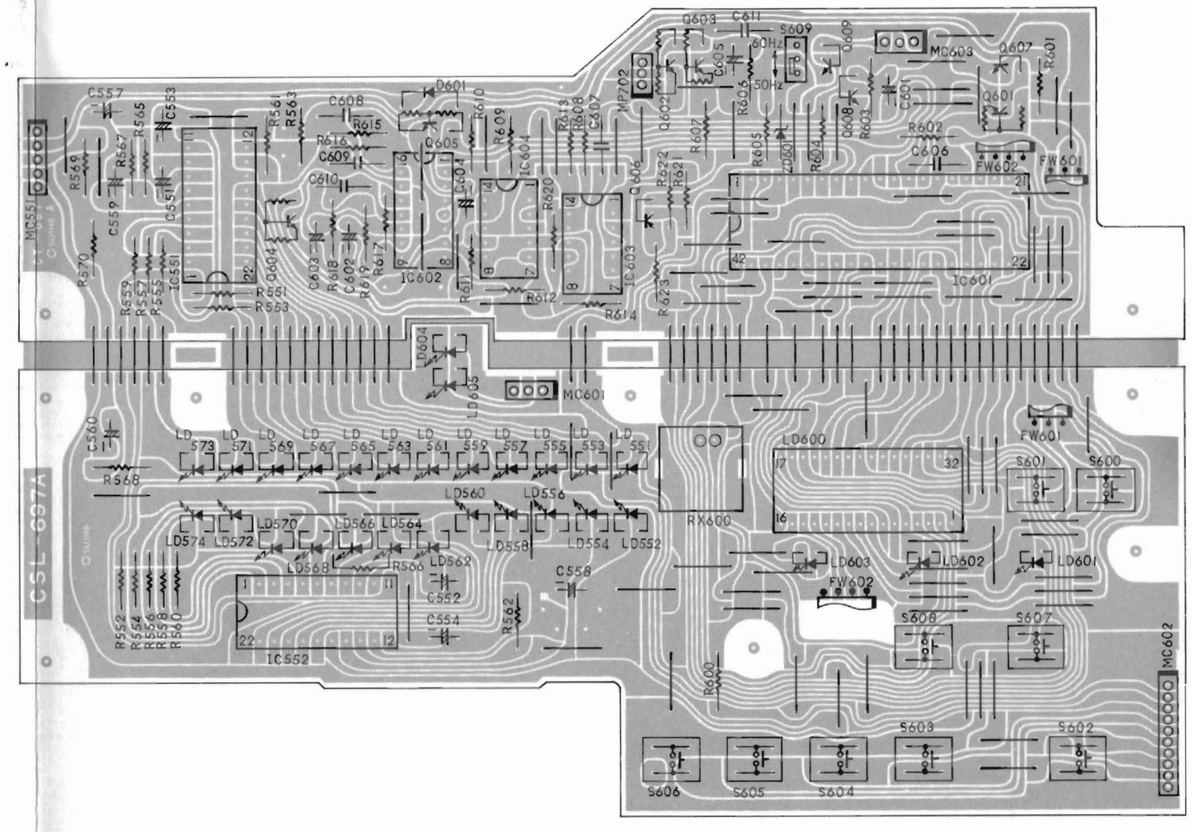
BLOCK DIAGRAM



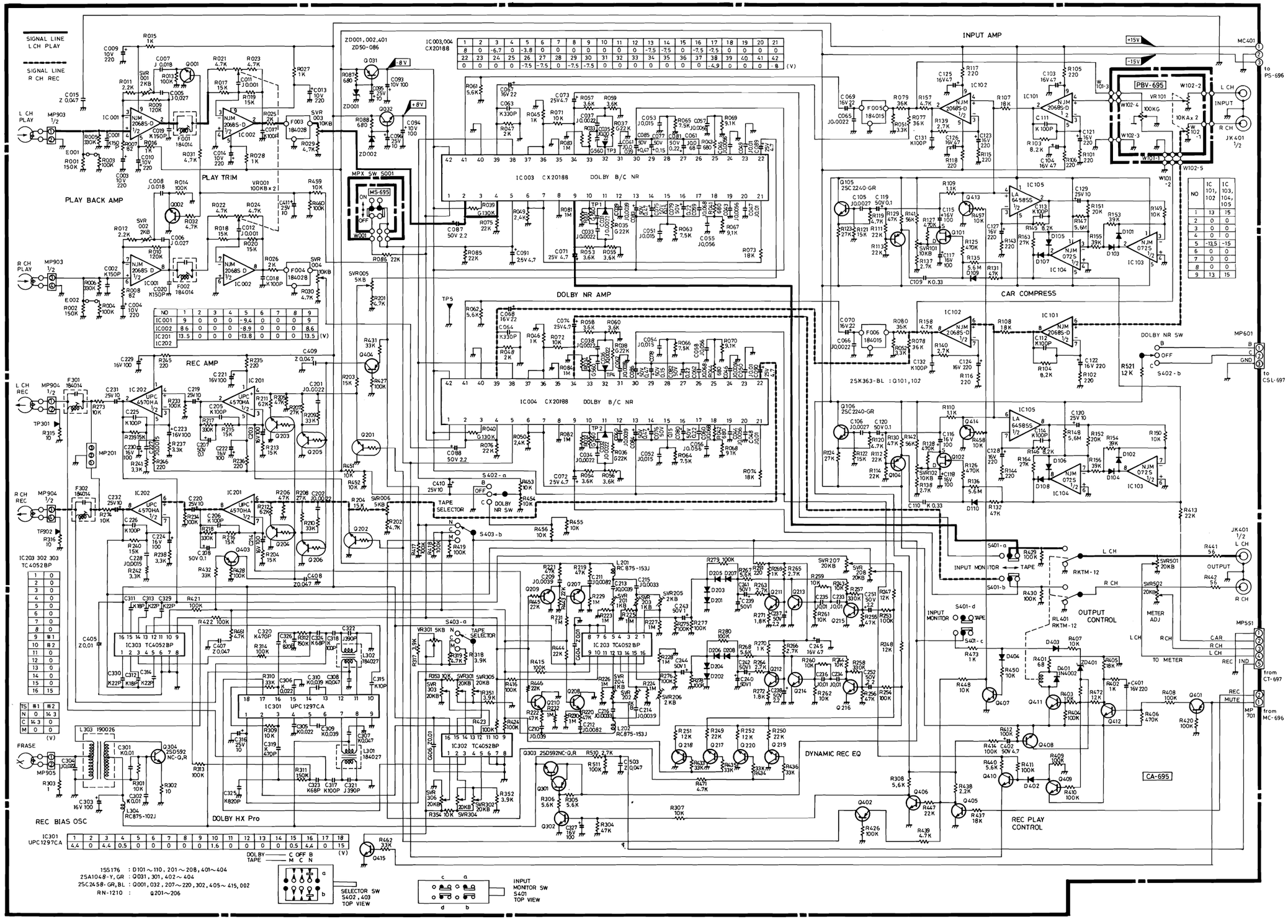
SCHEMATIC AND PCB LAYOUT (Foil side)

Control & Display drive (CSL & CT-PCB)





Main (CA-PCB)



NO	IC 101, 102	IC 103, 104, 105
1	13	15
2	0	0
3	0	0
4	0	0
5	-13.5	-15
6	0	0
7	0	0
8	0	0
9	13	15

IC003,004 CX20188	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
	8	0	-6.7	0	-3.8	0	0	0	0	0	0	-7.5	-7.5	0	-7.5	-7.5	0	0	0	0	0
	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
	0	0	0	0	-7.5	-7.5	0	-7.5	-7.5	0	0	0	0	0	0	0	-4.9	0	0	0	-8 (V)

NO	1	2	3	4	5	6	7	8	9
IC001	9	0	0	0	-9.4	0	0	0	9
IC002	8.6	0	0	0	-8.9	0	0	0	8.6
IC201 IC202	13.5	0	0	0	-13.8	0	0	0	13.5 (V)

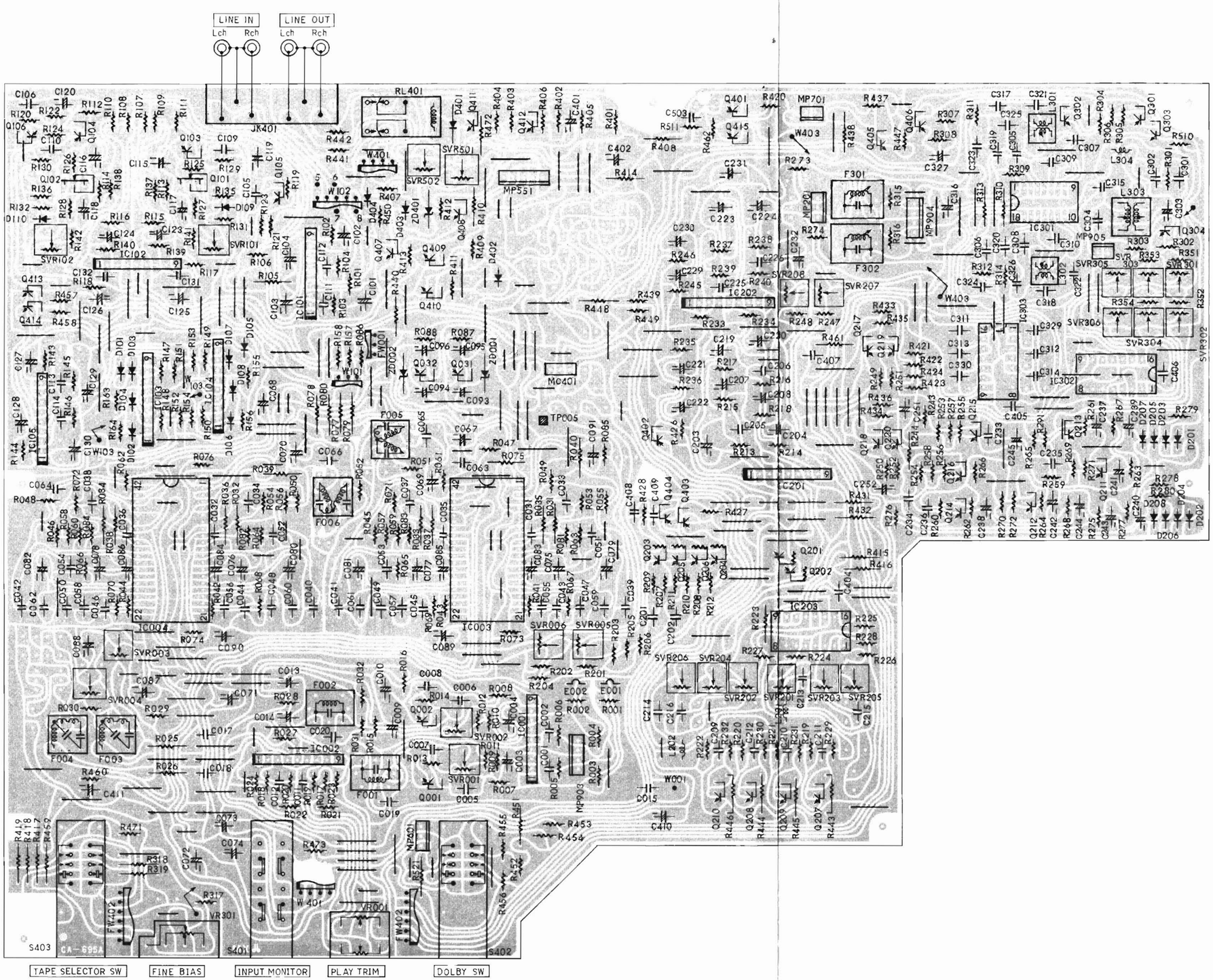
IC301 UPC1297CA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	4.4	0	4.4	0.5	0	0	0	0	0	1.6	0	0	0	0.5	4.4	0	15	

DOLBY-TAPE — C OFF B / M C N (V)

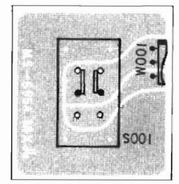
IC203 302 303 TC4052BP	
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	#1
10	#2
11	0
12	0
13	0
14	0
15	0
16	15

TS	#1	#2
N	0	14.3
C	14.3	0
M	0	0

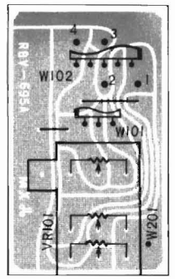
(V)



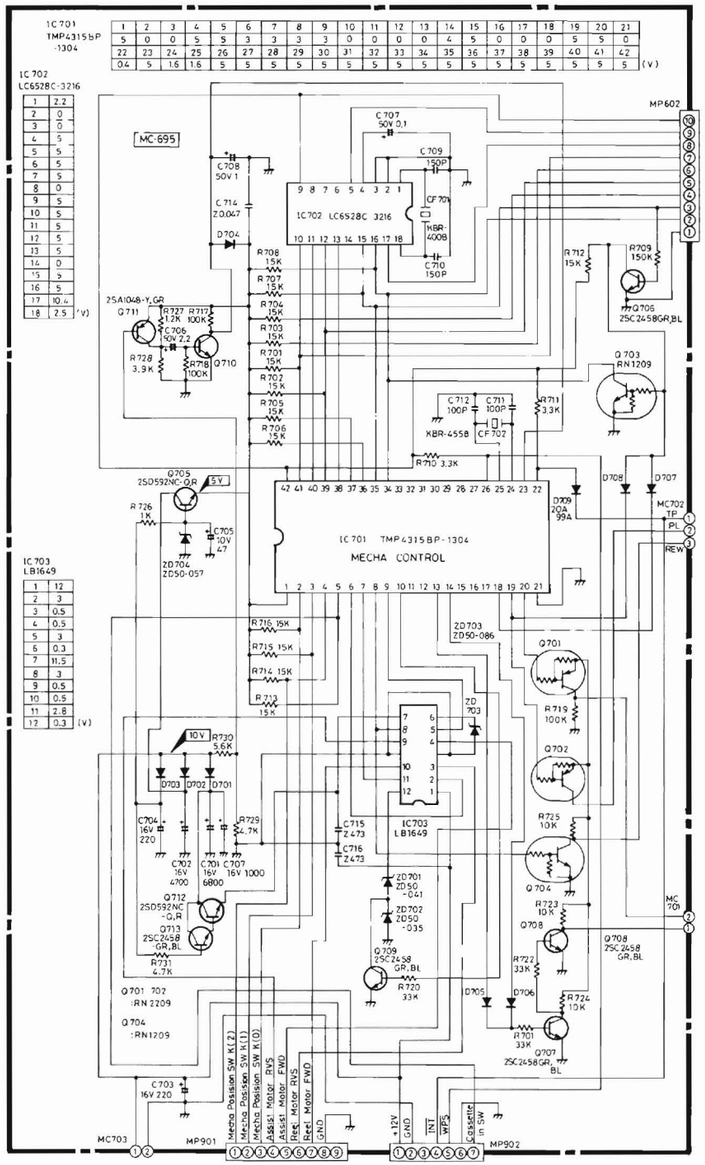
MPX switch (MS-PCB)

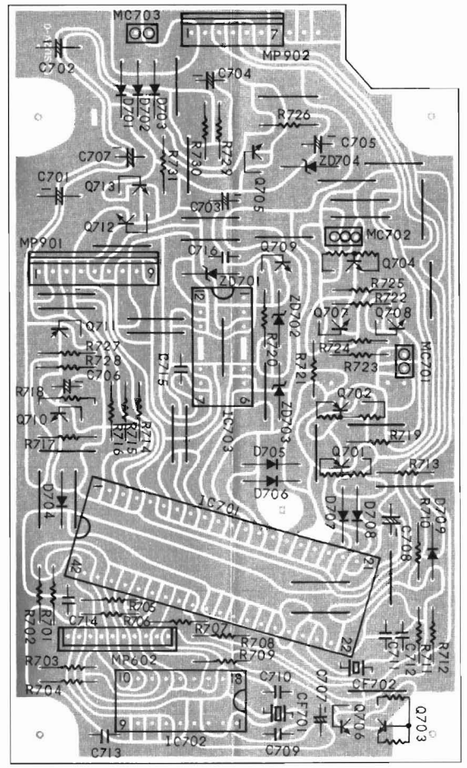


REC & Balance (RBV-PCB)

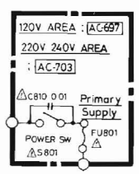


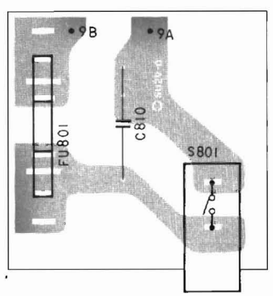
Mecha. control (MC-PCB)



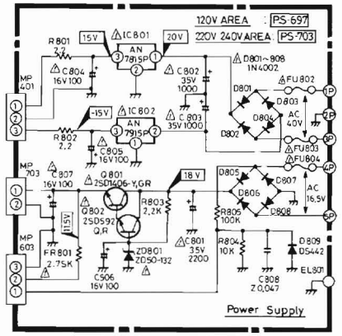


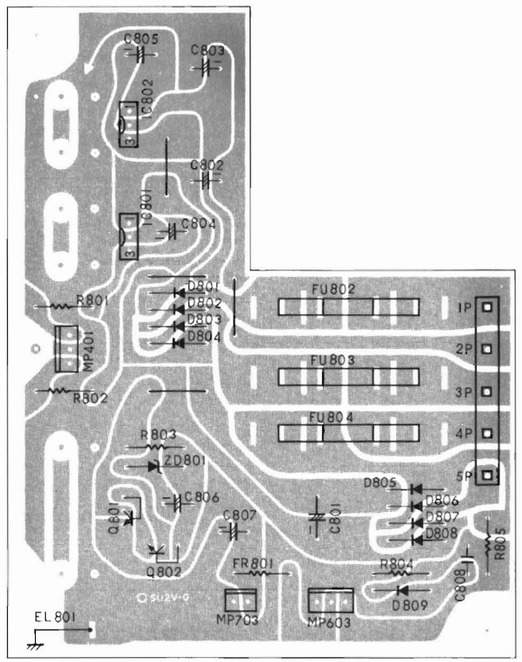
Alternating current (AC-PCB)



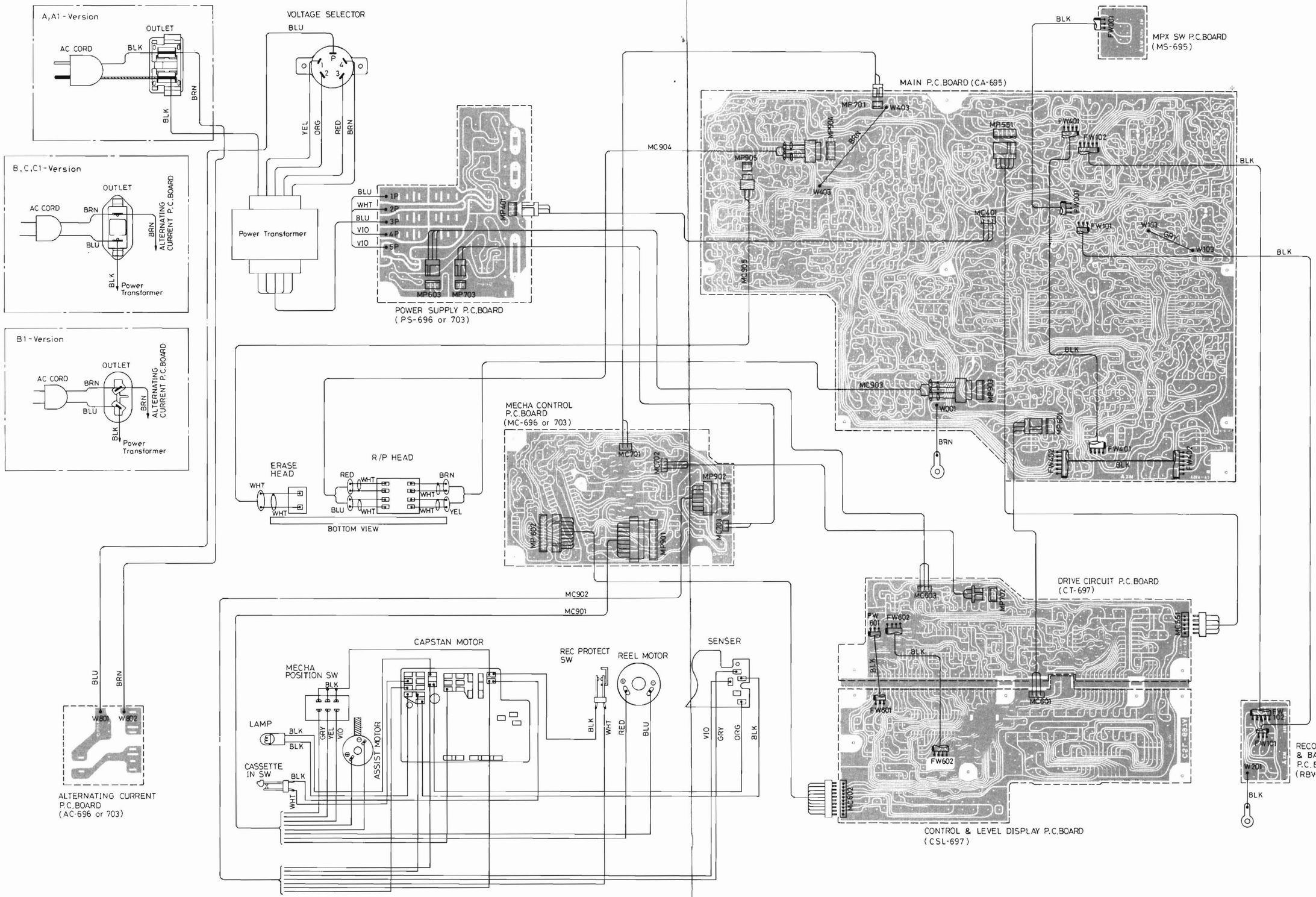


Power supply (PS-PCB)

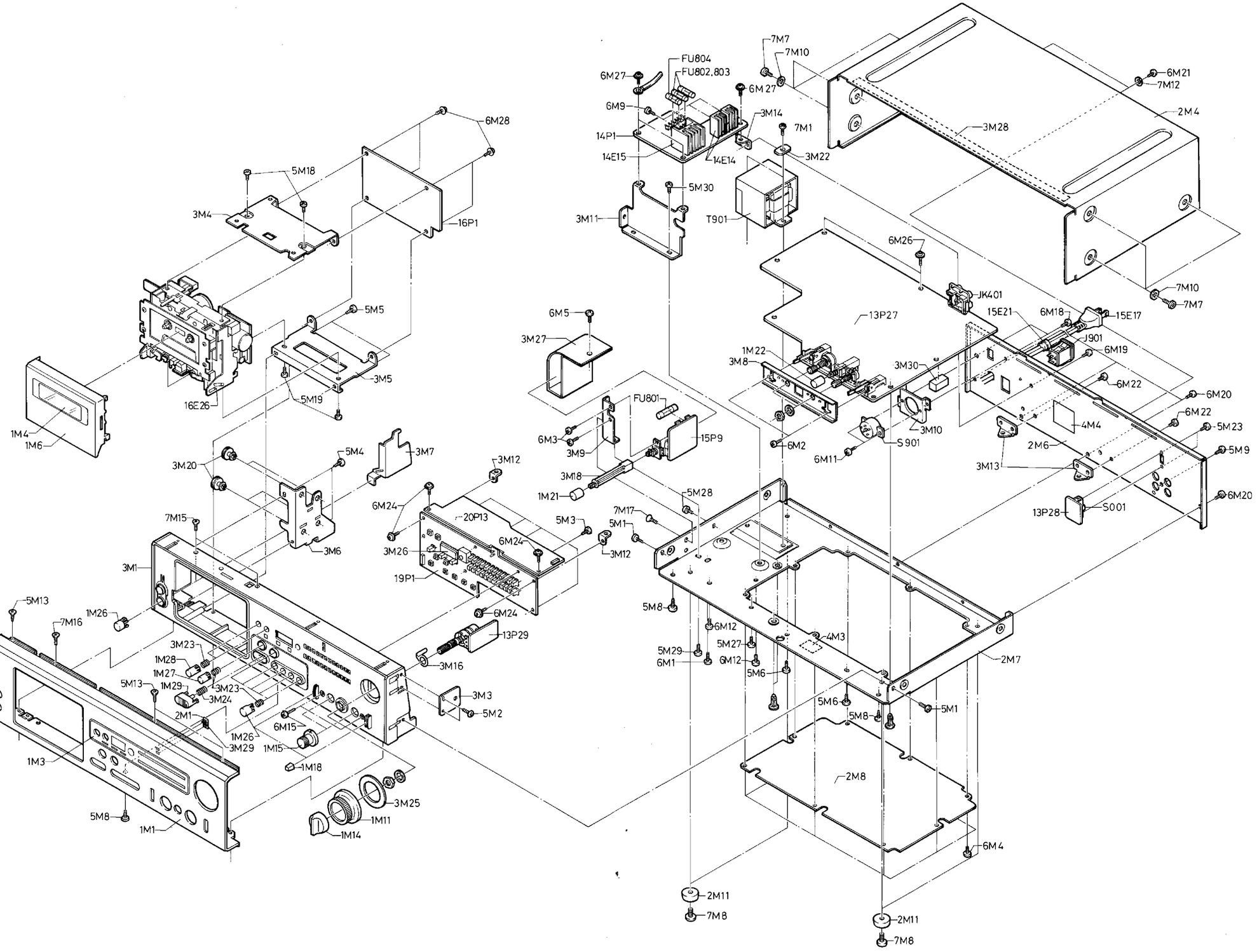




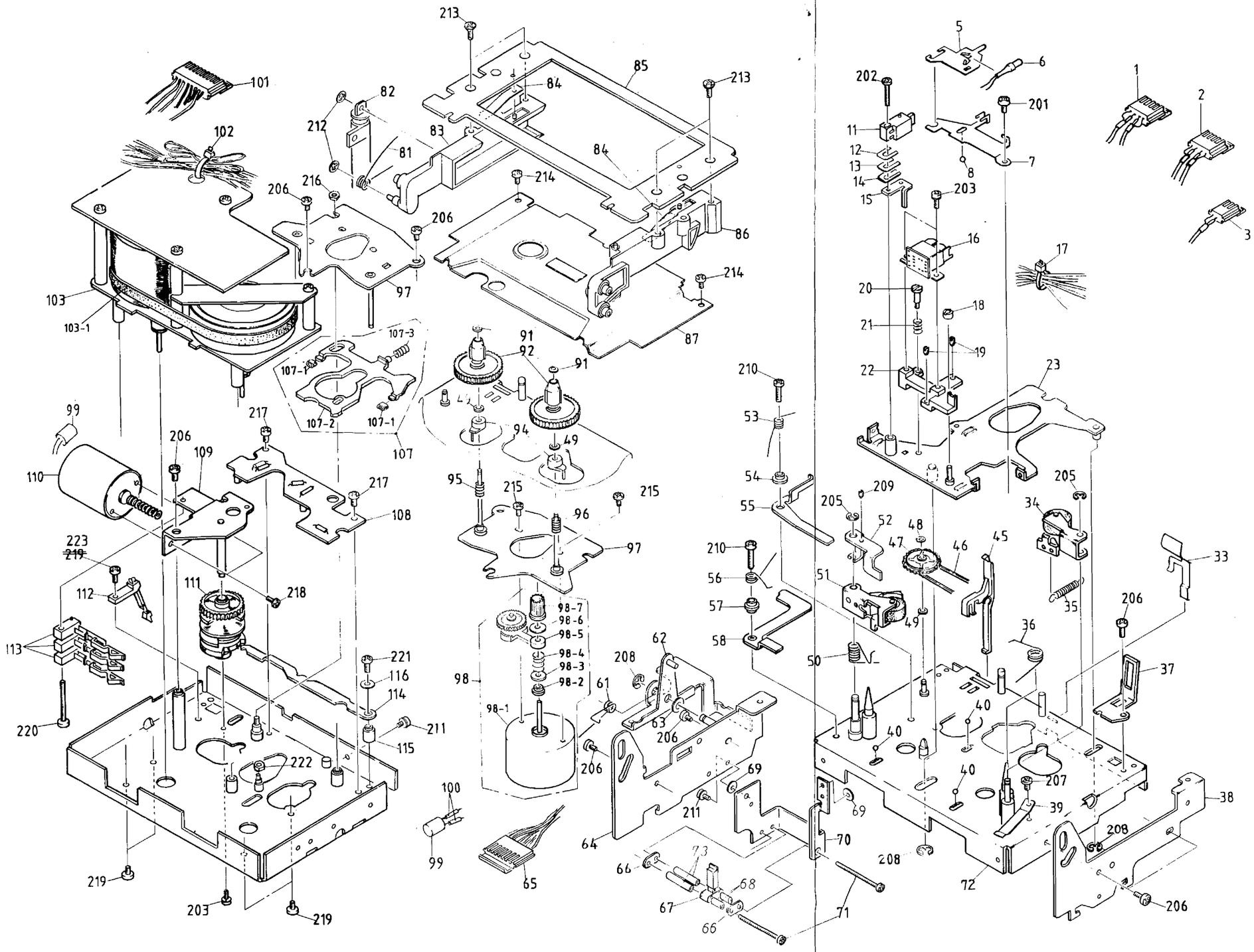
WIRING DIAGRAM (Component side)



EXPLODED VIEW AND PARTS LIST



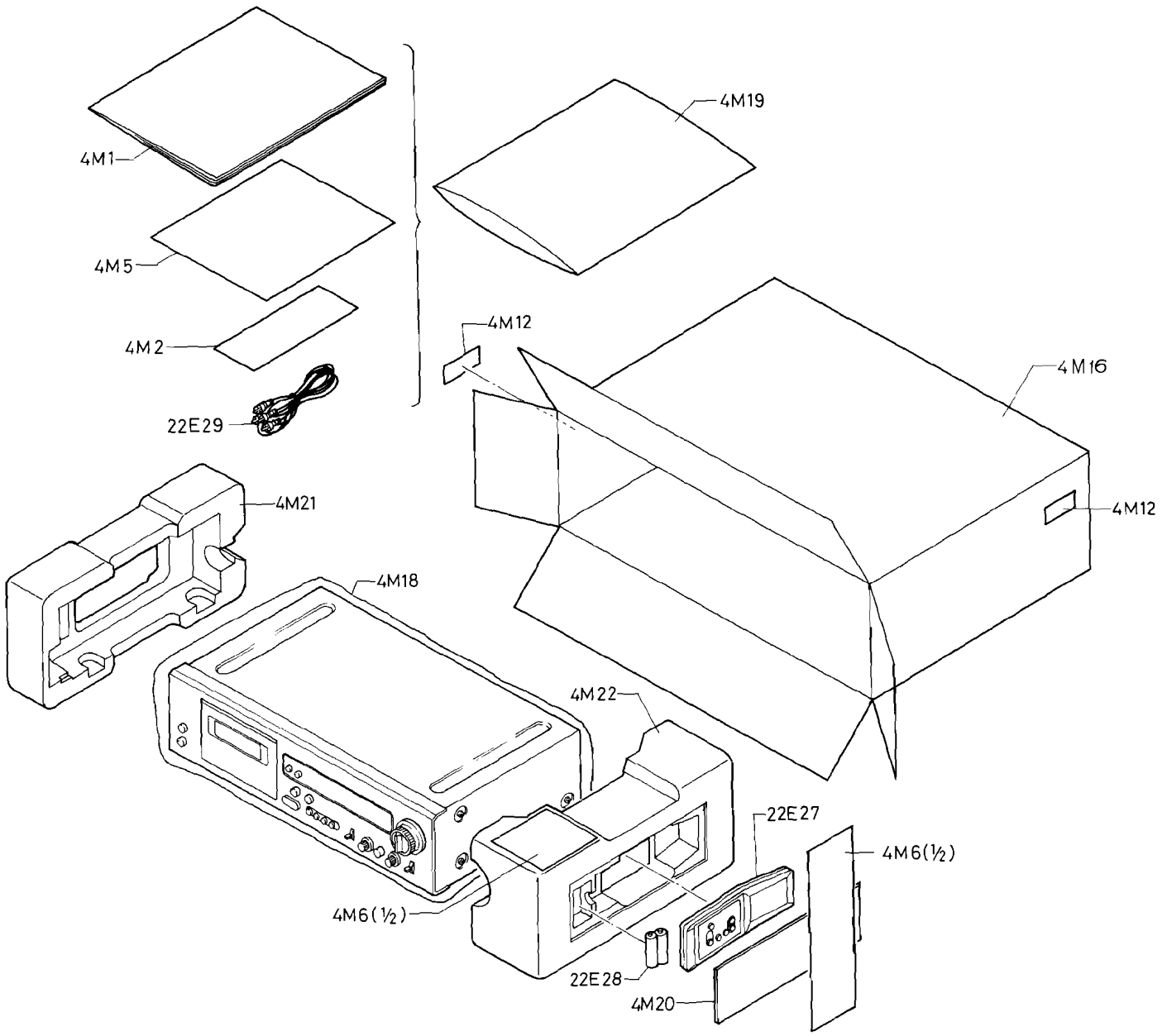
Cassette Mechanism



PAD-2316 CASSETTE MECHANISM

REF. NO.	Q'TY	PART NO.	DESCRIPTION
1	1	KGE104130	CONNECTOR (4P)
2	1	KGE104131	CONNECTOR (4P)
3	1	KGE104132	CONNECTOR (2P)
5	1	SIE3400701	LAMP HOLDER
6	1	SID4100601	LAMP
7	1	SIE2500901	HEAD BASE HOLDER
8	1	SIE3600203	STEEL BALL
11	1	308763003	ERASE HEAD
12	1	SIE3401101	SPACER T=0.06
13	1	SIE3401103	SPACER T=0.03
14	1	SIE3401102	SPACER T=0.1
15	1	SIE2101901	E. HEAD PLATE (8)
16	1	H2371-1115	REC/PLAY HEAD
17	1	KGE103283	WIRE CLAMPER
18	1	SIE2300801	NUT
19	2	SEE3053903	SCREW M2X4
20	1	SIE2205901	SCREW
21	1	SIE2402902	SPRING
22	1	SIE1100102	HEAD BLOCK
23	1	KGE015132	HEAD BASE SUB ASS'Y
33	1	KGE103234	CASSETTE SET SPRING
34	1	KGE015079	PINCH ARM ASS'Y
35	1	SIE2401701	SPRING
36	1	KGE103236	SPRING
37	1	SIE2101502	LEAF SW. HOLDER
38	1	SIE1900901	SIDE PLATE (R)
39	1	SIE2500101	CASSETTE SPRING
40	3	SIE3600201	STEEL BALL 2
45	1	SIE2000602	REC LEVER
46	1	KGE103272	BELT
47	1	KGE015113	PULLEY ASS'Y
48	1	SEE1022818	WASHER 1.8X3.8X0.5 CUT
49	3	PBE16032	WASHER 2.1X4.5X0.1
50	1	KGE103237	SPRING
51	1	KGE015112	S. PINCH ARM ASS'Y
52	1	KGE103232	ADJUST PLATE
53	1	KGE103246	SPRING
54	1	KGE103289	COLLAR
55	1	KGE103288	CHANGE LEVER
56	1	SIE2400701	SPRING
57	1	SIE2300401	COLLAR
58	1	KGE103233	LOCK PLATE
61	1	SIE2404801	SPRING
62	1	KGE015141	EJECT LEVER SUB ASS'Y
63	1	SEE1022602	WASHER
64	1	KGE015140	SIDE PLATE (L) SUB ASS'Y
65	1	KGE104129	CONNECTOR (7P)
66	2	KGE103271	WASHER
67	1	KGD103273	LEAF SWITCH
68	2	KGE103442	COLLAR
69	2	SEE1022603	WASHER
70	1	KGD103278	SWITCH PLATE
71	2	KGE103311	SCREW
72	1	KGD015073	CHASSIS SUB ASS'Y
73	2	KGE103443	COLLAR
81	1	SIE2406101	SPRING
82	1	KGE015064	SOFT DUMPER UNIT
83	1	SIE2900502	CASSETTE HOLDER (L)
84	2	SIE2501301	CASSETTE SPRING
85	1	SIE1902401	CASSETTE HOLDER PLATE
86	1	SIE2900402	CASSETTE HOLDER (R)
87	1	KGE015735	MECHA. COVER PLATE SUB ASS'Y
91	2	SEE1022802	WASHER
92	2	KGE015386	REEL SUB ASS'Y
94	2	KGE103238	SPRING HOLDER
95	1	SIE2407104	SPRING (S REEL)
96	1	SIE2407102	SPRING (T REEL)
97	1	KGE015142	MOTOR BRACKET SUB ASS'Y
98	1	KGE015736	REEL MOTOR SUB ASS'Y
98-1	1	308HS7801	REEL MOTOR
98-2	1	SIE3300201	SPRING HOLDER
98-3	1	SEE1022803	WASHER
98-4	1	SIE2404901	SPRING
98-5	1	KGE015550	IDLE GEAR SUB ASS'Y
98-6	1	SIE1700102	FELT
98-7	1	SIE2601402	MOTOR GEAR
99	2	KGE36880	CAPACITOR 22UF/16V
100	2	SEE2131802	TUBE 0.8X8
101	1	KGE103259	CONNECTOR (9P)
102	1	KGE103283	WIRE CLAMPER
103	1	30A20LL56	D.D. MOTOR UNIT
103-1	1	SIE1801303	BELT
107	1	KGE015133	BRAKE PLATE SUB ASS'Y
107-1	2	SIE1801902	BRAKE RUBBER
107-2	1	SIE2001603	BRAKE PLATE
107-3	1	SIE2408001	SPRING
108	1	KGE015074	SENSOR P.C.B. SUB ASS'Y
109	1	KGE015146	P.A.D. PLATE SUB ASS'Y
110	1	30VA700B02	P.A.D. MOTOR
111	1	SID2600101	CAM GEAR
112	1	30MSW1250	LEAF SWITCH
113	3	SID3800601	LEAF SWITCH
114	1	KGE103211	BRAKE LEVER
115	1	KGE103253	COLLAR
116	1	KGE103351	WASHER
201	1	SEE3055305	TAPPING SCREW M3X4
202	1	SEE3053803	BINDING SCREW M2X12
203	3	SEE3054501	SCREW M2X4
205	2	22145	E RING E2
206	8	SEE3053501	TAPPING SCREW M2.5X5
207	1	SEE2133401	TAPPING SCREW M2X3.2
208	3	SIE3600102	E RING E3
209	1	SEE3053902	SCREW M2X3
210	2	SEE3053504	TAPPING SCREW M2.5X10
211	2	SEE3054502	SCREW M2X5
212	2	SIE3601201	CS RING
213	4	SEE3055202	TAPPING SCREW M2.6X8
214	2	SEE3053512	TAPPING SCREW M2.5X3.5
215	2	SEE3053701	BINDING SCREW M2.6X3
216	1	18079	HEXAGON NUT
217	2	SEE3053507	TAPPING SCREW M2.5X4
218	2	SEE3056601	SCREW M2X3
219	4	SEE3057802	SCREW M2.6X6
220	1	SEE3053506	TAPPING SCREW M2.5X20
221	1	KGE103348	SCREW
222	1	18072	HEXAGON NUT M2.6
223	1	KGE98081	TAPPING SCREW M2.5X6

Packing Materials



MAIN PCB ASS'Y

REF. NO.	Q'TY	PART NO.	DESCRIPTION
P.C.BOARD			
13E27	1	CA-695A	PRINTED CIRCUIT BOARD
SEMICONDUCTORS			
D101~110, 201~208	18	1SS176	DIODE
D401	1	1N4002	DIODE
D402~404	3	1SS176	DIODE
Q001,002	2	2SC2458-GRBL	TRANSISTOR
Q031	1	2SA1048-Y,GR	TRANSISTOR
Q032	1	2SC2458-GRBL	TRANSISTOR
Q101,102	2	2SK363-BL	TRANSISTOR
Q103,104	2	2SA1048-Y,GR	TRANSISTOR
Q105,106	2	2SC2240-GR	TRANSISTOR
Q201~206	6	RN-1210	TRANSISTOR
Q207~220	14	2SC2458-GRBL	TRANSISTOR
Q301	1	2SA1048-Y,GR	TRANSISTOR
Q302	1	2SC2458-GRBL	TRANSISTOR
Q303,304	2	2SD592NC-Q,R	TRANSISTOR
Q401~404	4	2SA1048-Y,GR	TRANSISTOR
Q405~415	11	2SC2458-GRBL	TRANSISTOR
IC001,002	2	NJM2068S-D	IC
IC003,004	2	CX20188	IC
IC101,102	2	NJM2068S-D	IC
IC103,104	2	NJM072S	IC
IC105	1	LA6458SS	IC
IC201,202	2	UPC4570HA	IC
IC203	1	TC40528P	IC
IC301	1	UPC1297CA	IC
IC302,303	2	TC40528P	IC
ZD001,002, 401	3	ZD50-086	ZENER DIODE,1/2W,8.6V
CAPACITORS			
C001,002	2	HE40SJYB151K	CERAMIC CAPACITOR
C003,004	2	NS-10TW221M	ELECTROLYTIC CAPACITOR
C005,006	2	MY-50VS273J	MYLAR CAPACITOR
C007,008	2	MY-50VS183J	MYLAR CAPACITOR
C009,010	2	NS-10TW221M	ELECTROLYTIC CAPACITOR
C011,012	2	MY-50VS102J	MYLAR CAPACITOR
C013,014	2	NS-10TW221M	ELECTROLYTIC CAPACITOR
C015	1	HC10SJZF473Z	CERAMIC CAPACITOR
C017,018	2	HE40SJYB101K	CERAMIC CAPACITOR
C019,020	2	HE40SJYB151K	CERAMIC CAPACITOR
C031~038	8	MY-50VS222J	MYLAR CAPACITOR
C039~042	4	MY-50VS392J	MYLAR CAPACITOR
C043~046	4	MY-50VS562J	MYLAR CAPACITOR
C047~050	4	MY-50VS103J	MYLAR CAPACITOR
C051~054	4	MY-50VS153J	MYLAR CAPACITOR
C055~058	4	MY-50VS563J	MYLAR CAPACITOR
C059~062	4	MY-50VS683J	MYLAR CAPACITOR
C063,064	2	HE40SJYB331K	CERAMIC CAPACITOR
C065,066	2	MY-50VS222J	MYLAR CAPACITOR
C067~070	4	NS-16TW220M	ELECTROLYTIC CAPACITOR
C071~074	4	NS-25TW4R7M	ELECTROLYTIC CAPACITOR
C075~078	4	NS-50TWR15M	ELECTROLYTIC CAPACITOR
C079~082	4	NS-50TWR22M	ELECTROLYTIC CAPACITOR
C083~086	4	NS-50TWR47M	ELECTROLYTIC CAPACITOR
C087,088	2	NS-50TW2R2M	ELECTROLYTIC CAPACITOR
C089~091	3	NS-25TW4R7M	ELECTROLYTIC CAPACITOR
C093,094	2	NS-10TW101M	ELECTROLYTIC CAPACITOR
C095,096	2	NS-25TW100M	ELECTROLYTIC CAPACITOR
C101,102	2	NS-16TW221M	ELECTROLYTIC CAPACITOR
C103,104	2	NS-16TW470M	ELECTROLYTIC CAPACITOR
C105,106	2	MY-50VS272J	MYLAR CAPACITOR
C109,110	2	MY-50VU334K-KF	MYLAR CAPACITOR
C111~114	4	HE40SJYB101K	CERAMIC CAPACITOR
C115~118	4	NS-16TW101M	ELECTROLYTIC CAPACITOR
C119,120	2	NS-50TWR10M	ELECTROLYTIC CAPACITOR
C123,124	2	NS-16TW221M	ELECTROLYTIC CAPACITOR
C125,126	2	NS-16TW470M	ELECTROLYTIC CAPACITOR
C127,128	2	NS-16TW221M	ELECTROLYTIC CAPACITOR
C129,130	2	NS-25TW100M	ELECTROLYTIC CAPACITOR
C131,132	2	HE40SJYB101K	CERAMIC CAPACITOR
C201,202	2	MY-50VS222J	MYLAR CAPACITOR
C203,204	2	NS-16TW101M	ELECTROLYTIC CAPACITOR
C205,206	2	HE40SJYB101K	CERAMIC CAPACITOR
C207,208	2	NS-50TWR10M	ELECTROLYTIC CAPACITOR
C209,210	2	MY-50VS392J	MYLAR CAPACITOR
C211,212	2	MY-50VS822J	MYLAR CAPACITOR
C213,214	2	MY-50VS392J	MYLAR CAPACITOR
C215,216	2	MY-50VS332J	MYLAR CAPACITOR
C219,220	2	NS-25TW100M	ELECTROLYTIC CAPACITOR
C221~224	4	NS-16TW101M	ELECTROLYTIC CAPACITOR
C225,226	2	HE40SJYB101K	CERAMIC CAPACITOR
C227,228	2	MY-50VS152J	MYLAR CAPACITOR
C229,230	2	NS-16TW101M	ELECTROLYTIC CAPACITOR
C231,232	2	NS-25TW100M	ELECTROLYTIC CAPACITOR
C233~236	4	MY-50VS103J	MYLAR CAPACITOR
C237,238	2	NS-50TW2R2M	ELECTROLYTIC CAPACITOR
C239~244	6	NS-50TW1R0M	ELECTROLYTIC CAPACITOR
C245	1	NS-16TW470M	ELECTROLYTIC CAPACITOR
C251,252	2	NS-50TW2R2M	ELECTROLYTIC CAPACITOR
C301,302	2	MY-50VS103K	MYLAR CAPACITOR
C303	1	NS-16TW101M	ELECTROLYTIC CAPACITOR
C304	1	MY100VS223J	MYLAR CAPACITOR
C305,306	2	MY-50VS223K	MYLAR CAPACITOR
C307,308	2	MY-50VU473K	MYLAR CAPACITOR

REF. NO.	Q'TY	PART NO.	DESCRIPTION
C309,310	2	MY-50VU393K	MYLAR CAPACITOR
C311,312	2	HE40SJSL180K	CERAMIC CAPACITOR
C313,314	2	HE40SJSL220K	CERAMIC CAPACITOR
C315	1	HE40SJSL100K	CERAMIC CAPACITOR
C316	1	NS-25TW100M	ELECTROLYTIC CAPACITOR
C317,318	2	HE40SJYB101K	CERAMIC CAPACITOR
C319,320	2	HE40SJYB471K	CERAMIC CAPACITOR
C321,322	2	HE80SJSL391J	CERAMIC CAPACITOR
C323,324	2	HE40SJSL680K	CERAMIC CAPACITOR
C325,326	2	HE40SJYB821K	CERAMIC CAPACITOR
C327	1	NS-16TW101M	ELECTROLYTIC CAPACITOR
C329,330	2	HE40SJSL220K	CERAMIC CAPACITOR
C401	1	NS-16TW221M	ELECTROLYTIC CAPACITOR
C402	1	NS-50TW4R7M	ELECTROLYTIC CAPACITOR
C404~406	3	HE70SJYF103Z	CERAMIC CAPACITOR
C407~409	3	HC10SJZF473Z	CERAMIC CAPACITOR
C410,411	2	NS-25TW100M	ELECTROLYTIC CAPACITOR
C503	1	HC10SJZF473Z	CERAMIC CAPACITOR
RESISTORS			
R001,002	2	KA16ST154J	CARBON RESISTOR
R003,004	2	KA16ST104J	CARBON RESISTOR
R005,006	2	KA16ST334J	CARBON RESISTOR
R007,008	2	KA16ST820J	CARBON RESISTOR
R009,010	2	KA16ST124J	CARBON RESISTOR
R011,012	2	KA16ST222J	CARBON RESISTOR
R013,014	2	KA16ST104J	CARBON RESISTOR
R015,016	2	KA16ST102J	CARBON RESISTOR
R017~020	4	KA16ST153J	CARBON RESISTOR
R021~024	4	KA16ST472J	CARBON RESISTOR
R025,026	2	KA16ST202J	CARBON RESISTOR
R027,028	2	KA16ST102J	CARBON RESISTOR
R029~032	4	KA16ST472J	CARBON RESISTOR
R031~034	4	MF25ST561G	METAL FILM RESISTOR
R035~038	4	MF25ST223G	METAL FILM RESISTOR
R039,040	2	MF25ST134G	METAL FILM RESISTOR
R041~044	4	KA16ST681J	CARBON RESISTOR
R045,046	2	KA16ST102J	CARBON RESISTOR
R047,048	2	KA16ST202J	CARBON RESISTOR
R049,050	2	KA16ST242J	CARBON RESISTOR
R051,052	2	KA16ST332J	CARBON RESISTOR
R053~060	8	KA16ST362J	CARBON RESISTOR
R061,062	2	KA16ST562J	CARBON RESISTOR
R063~066	4	KA16ST752J	CARBON RESISTOR
R067~070	4	KA16ST912J	CARBON RESISTOR
R071,072	2	KA16ST103J	CARBON RESISTOR
R073,074	2	KA16ST183J	CARBON RESISTOR
R075,076	2	KA16ST223J	CARBON RESISTOR
R077~080	4	KA16ST363J	CARBON RESISTOR
R081~084	4	KA16ST105J	CARBON RESISTOR
R085,086	2	KA16ST223J	CARBON RESISTOR
R087,088	2	KA16ST681J	CARBON RESISTOR
R101,102	2	KA16ST221J	CARBON RESISTOR
R103,104	2	KA16ST822J	CARBON RESISTOR
R105,106	2	KA16ST221J	CARBON RESISTOR
R107,108	2	KA16ST183J	CARBON RESISTOR
R109,110	2	KA16ST112J	CARBON RESISTOR
R111~114	4	KA16ST223J	CARBON RESISTOR
R115~118	4	KA16ST221J	CARBON RESISTOR
R119,120	2	KA16ST472J	CARBON RESISTOR
R121,122	2	KA16ST153J	CARBON RESISTOR
R123,124	2	KA16ST273J	CARBON RESISTOR
R125~128	4	KA16ST474J	CARBON RESISTOR
R129~132	4	KA16ST473J	CARBON RESISTOR
R135,136	2	KA16ST565J	CARBON RESISTOR
R137~140	4	KA16ST272J	CARBON RESISTOR
R141,142	2	KA16ST563J	CARBON RESISTOR
R143,144	2	KA16ST221J	CARBON RESISTOR
R145,146	2	KA16ST822J	CARBON RESISTOR
R147,148	2	KA16ST565J	CARBON RESISTOR
R149,150	2	KA16ST103J	CARBON RESISTOR
R151,152	2	KA16ST203J	CARBON RESISTOR
R153~156	4	KA16ST393J	CARBON RESISTOR
R157,158	2	KA16ST472J	CARBON RESISTOR
R163,164	2	KA16ST273J	CARBON RESISTOR
R201,202	2	KA16ST472J	CARBON RESISTOR
R203,204	2	KA16ST153J	CARBON RESISTOR
R205,206	2	KA16ST473J	CARBON RESISTOR
R207,208	2	KA16ST273J	CARBON RESISTOR
R209,210	2	KA16ST333J	CARBON RESISTOR
R211,212	2	KA16ST623J	CARBON RESISTOR
R213~216	4	KA16ST153J	CARBON RESISTOR
R217,218	2	KA16ST334J	CARBON RESISTOR
R219~222	4	KA16ST473J	CARBON RESISTOR
R223~232	10	KA16ST105J	CARBON RESISTOR
R233,234	2	KA16ST104J	CARBON RESISTOR
R235,236	2	KA16ST221J	CARBON RESISTOR
R237,238	2	KA16ST332J	CARBON RESISTOR
R239,240	2	KA16ST153J	CARBON RESISTOR
R241,242	2	KA16ST332J	CARBON RESISTOR
R243,244	2	KA16ST103J	CARBON RESISTOR
R245,246	2	KA16ST221J	CARBON RESISTOR
R247,248	2	KA16ST123J	CARBON RESISTOR
R249,250	2	KA16ST223J	CARBON RESISTOR
R251,252	2	KA16ST123J	CARBON RESISTOR
R253,254	2	KA16ST104J	CARBON RESISTOR
R255,256	2	KA16ST473J	CARBON RESISTOR
R257,258	2	KA16ST334J	CARBON RESISTOR
R259~262	4	KA16ST103J	CARBON RESISTOR
R263~266	4	KA16ST272J	CARBON RESISTOR

REF. NO.	Q'TY	PART NO.	DESCRIPTION
R267,268	2	KA16ST562J	CARBON RESISTOR
R269,270	2	KA16ST102J	CARBON RESISTOR
R271,272	2	KA16ST182J	CARBON RESISTOR
R273,274	2	KA16ST103J	CARBON RESISTOR
R275~280	6	KA16ST104J	CARBON RESISTOR
R291	1	KA16ST221J	CARBON RESISTOR
R301	1	KA16ST103J	CARBON RESISTOR
R302	1	KA16ST220J	CARBON RESISTOR
R303	1	KA16ST1R0J	CARBON RESISTOR
R304	1	KA16ST473J	CARBON RESISTOR
R305,306	2	KA16ST562J	CARBON RESISTOR
R307	1	KA16ST103J	CARBON RESISTOR
R308	1	KA16ST562J	CARBON RESISTOR
R309,310	2	KA16ST333J	CARBON RESISTOR
R311,312	2	KA16ST154J	CARBON RESISTOR
R313,314	2	KA16ST104J	CARBON RESISTOR
R315,316	2	KA16ST100J	CARBON RESISTOR
R317,318	2	KA16ST392J	CARBON RESISTOR
R319	1	KA16ST472J	CARBON RESISTOR
R351,352	2	KA16ST392J	CARBON RESISTOR
R353,354	2	KA16ST103J	CARBON RESISTOR
R401	1	KA16ST680J	CARBON RESISTOR
R402	1	KA16ST102J	CARBON RESISTOR
R403	1	KA16ST103J	CARBON RESISTOR
R404	1	KA16ST104J	CARBON RESISTOR
R405	1	KA16ST183J	CARBON RESISTOR
R406	1	KA16ST474J	CARBON RESISTOR
R407	1	KA16ST103J	CARBON RESISTOR
R408~412	5	KA16ST104J	CARBON RESISTOR
R413	1	KA16ST223J	CARBON RESISTOR
R414~424, 426~430	16	KA16ST104J	CARBON RESISTOR
R431~436	6	KA16ST333J	CARBON RESISTOR
R437	1	KA16ST183J	CARBON RESISTOR
R438	1	KA16ST222J	CARBON RESISTOR
R439	1	KA16ST472J	CARBON RESISTOR
R440	1	KA16ST562J	CARBON RESISTOR
R441,442	2	KA16ST560J	CARBON RESISTOR
R443~447	5	KA16ST223J	CARBON RESISTOR
R448~459	12	KA16ST103J	CARBON RESISTOR
R460	1	KA16ST104J	CARBON RESISTOR
R461	1	KA16ST472J	CARBON RESISTOR
R462	1	KA16ST333J	CARBON RESISTOR
R471	1	KA16ST472J	CARBON RESISTOR
R472	1	KA16ST123J	CARBON RESISTOR
R473	1	KA16ST102J	CARBON RESISTOR
R510	1	KA16ST272J	CARBON RESISTOR
R511	1	KA16ST104J	CARBON RESISTOR
R521	1	KA16ST122J	CARBON RESISTOR
VR001	1	EWGG1A385B15	ROTARY POTENTIOMETER
VR301	1	EWHHXA840B53	VARIABLE RESISTOR
SVR001,002	2	SVR-06T3B202	SEMI-VARIABLE
SVR003,004	2	SVR-06T3B103	SEMI-VARIABLE
SVR005,006	2	SVR-06T3B502	SEMI-VARIABLE
SVR101,102	2	SVR-06T3B103	SEMI-VARIABLE
SVR201~204	4	SVR-06T3B102	SEMI-VARIABLE
SVR205,206	2	SVR-06T3B202	SEMI-VARIABLE
SVR207,208, 301~306, 501,502	10	SVR-06T3B203	SEMI-VARIABLE
COILS			
F001,002	2	184014	FILTER BLOCK
F003,004	2	184028	FILTER BLOCK
F005,006	2	184015	FILTER BLOCK
F301,302	2	184014	FILTER BLOCK
L201,202	2	RC875-153J	INDUCTOR
L301,302	2	184027	FILTER BLOCK
L303	1	190026	OSC COIL
L304	1	RC875-102J	INDUCTOR
SWITCHES			
S401	1	SW-12210181	PUSH SWITCH
S402,403	2	SW-42350180	SLIDE SWITCH
MISCELLANEOUS			
E001,002	2	IPS-1034-1	JUMP WIRE
W001	1	R-020-30	CABLE ASS'Y
W103	1	007S240N06-J-J	SOLDER-PLATED WIRE
W201	1	007S240B07-C-C	SOLDER-PLATED WIRE
W403	1	007S240T12-J-J	SOLDER-PLATED WIRE
FW001	1	468S263B20-J-J	3-LEAD, FLAT CABLE
FW101	1	468S263B25-J-J	3-LEAD, FLAT CABLE
FW102	1	468S245B30-J-J	5-LEAD, FLAT CABLE
FW401	1	468S264B25-J-J	4-LEAD, FLAT CABLE
FW402	1	468S266B12-J-J	6-LEAD, FLAT CABLE
JK401	1	YKC21-0018A	RCA JACK 4P
MC401	1	MC03-542	MICRO SOCKET ASS'Y
MP201	1	171825-3	MICRO PLUG
MP551	1	171825-5	MICRO PLUG
MP601	1	171825-3	MICRO PLUG
MP701	1	171825-2	MICRO PLUG
MP903,904	2	84P-SHF-1AA	MICRO PLUG

REF. NO.	Q'TY	PART NO.	DESCRIPTION
MP905	1	B2P-SHF-1AA	MICRO PLUG
RL401	1	RKTN-12	RELAY
TP005	1	RP-001	TERMINAL PIN
13E21	70	4E-T05	JUMP WIRE
13E22	141	5E-T05	JUMP WIRE

REC. & BALANCE PCB ASS'Y

REF. NO.	Q'TY	PART NO.	DESCRIPTION
P.C.BOARD			
13E29	1	R8V-695A	PRINTED CIRCUIT BOARD
RESISTORS			
VR101	1	EWG-PEAW02196	VARIABLE RESISTOR
MISCELLANEOUS			
3M16	1	N41622A	LUG (TUNING)
13E24	1	4E-T05	JUMP WIRE
13E25	1	5E-T05	JUMP WIRE

MPX SWITCH PCB ASS'Y

REF. NO.	Q'TY	PART NO.	DESCRIPTION
P.C.BOARD			
13E28	1	MS-695A	PRINTED CIRCUIT BOARD
SWITCHES			
S001	1	SW-5222174	SLIDE SWITCH

POWER SUPPLY PCB ASS'Y

REF. NO.	Q'TY	PART NO.	DESCRIPTION
P.C.BOARD			
14E 1	1	PS-696A	PRINTED CIRCUIT BOARD
SEMICONDUCTORS			
D801~808	8	1N4002	DIODE
D809	1	DS442	DIODE
Q801	1	2SD1406-Y,GR	TRANSISTOR
Q802	1	2SD592NC-Q,R	TRANSISTOR
IC801	1	AN7815F	IC
IC802	1	AN7915F	IC
ZD801	1	ZD50-132	ZENER DIODE,1/2W,13.2V
CAPACITORS			
C801	1	NS-25TW222M-KF	ELECTROLYTIC CAPACITOR
C802,803	2	NS-35TW102M-KF	ELECTROLYTIC CAPACITOR
C804~807	4	NS-16TW101M	ELECTROLYTIC CAPACITOR
C808	1	HC10SJZF473Z	CERAMIC CAPACITOR
RESISTORS			
R801,802	2	KA25ST2R2J	CARBON RESISTOR
R803	1	KA25ST222J	CARBON RESISTOR
R804	1	KA25ST103J	CARBON RESISTOR
R805	1	KA25ST104J	CARBON RESISTOR
FR801	1	RF25SK2R7J	FUSIBLE RESISTOR
MISCELLANEOUS			
W801	1	672S220T20-C-O	SOLDER-PLATED WIRE
W802	1	672S220A20-C-O	SOLDER-PLATED WIRE
6M 9	3	TSB+30X08-Y	TAP SCREW S, BIND HEAD, Y
EL801	1	59BS1692	GND LUG
FU802,803	2	FU-521024-GGS	FUSE
FU804	1	FU-512024-GGS	FUSE
MP401,603	2	171825-3	MICRO PLUG
MP703	1	171825-2	MICRO PLUG
14E14	2	OSH-1625-MP	HEAT SINK
14E15	1	OSH-3030-MP	HEAT SINK
14E21	4	5E-T05	JUMP WIRE
14E26	6	23165102-BB-C	FUSE HOLDER
15E 6	1	WE-5	TERMINAL PIN

MECHA. CONTROL PCB ASS'Y

REF. NO.	Q'TY	PART NO.	DESCRIPTION
P.C.BOARD			
16E 1	1	MC-696A	PRINTED CIRCUIT BOARD
SEMICONDUCTORS			
D701~703	3	1N4002	DIODE
D704~708	5	DS442	DIODE
D709	1	20A99A	DIODE
Q701,702	2	RN-2209	TRANSISTOR
Q703,704	2	RN-1209	TRANSISTOR
Q705	1	2SD592NC-Q,R	TRANSISTOR
Q706~710	5	2SC2458-GRBL	TRANSISTOR
Q711	1	2SA1048-Y,GR	TRANSISTOR
Q712	1	2SD592NC-Q,R	TRANSISTOR
Q713	1	2SC2458-GRBL	TRANSISTOR
IC701	1	TMP43158P-1304	IC
IC702	1	LC6528C-3216	IC
IC703	1	LB1649	IC
ZD701	1	ZD50-041	ZENER DIODE,1/2W,4.1V
ZD702	1	ZD50-035	ZENER DIODE,1/2W,3.5V
ZD703	1	ZD50-086	ZENER DIODE,1/2W,8.6V
ZD704	1	ZD50-057	ZENER DIODE,1/2W,5.7V
CAPACITORS			
C701	1	NS-16TW682M-KF	ELECTROLYTIC CAPACITOR
C702	1	NS-16TW472M-KF	ELECTROLYTIC CAPACITOR
C703,704	2	NS-16TW221M	ELECTROLYTIC CAPACITOR
C705	1	NS-10TW470M	ELECTROLYTIC CAPACITOR
C706	1	NS-50TWR22M	ELECTROLYTIC CAPACITOR
C707	1	NS-50TWR10M	ELECTROLYTIC CAPACITOR
C707	1	NS-16TW102M-KF	ELECTROLYTIC CAPACITOR
C708	1	NS-50TW1R0M	ELECTROLYTIC CAPACITOR
C709,710	2	HE40SJYB151K	CERAMIC CAPACITOR
C711,712	2	HE40SJYB101K	CERAMIC CAPACITOR
C713~716	4	HC10SJZF473Z	CERAMIC CAPACITOR
RESISTORS			
R701~708	8	KA16ST153J	CARBON RESISTOR
R709	1	KA16ST154J	CARBON RESISTOR
R710,711	2	KA16ST332J	CARBON RESISTOR
R712	1	KA16ST153J	CARBON RESISTOR
R713~716	4	KA16ST152J	CARBON RESISTOR
R717~719	3	KA16ST104J	CARBON RESISTOR
R720~722	3	KA16ST333J	CARBON RESISTOR
R723~725	3	KA16ST103J	CARBON RESISTOR
R726	1	KA16ST102J	CARBON RESISTOR
R727	1	KA16ST122J	CARBON RESISTOR
R728	1	KA16ST392J	CARBON RESISTOR
R729	1	KA16ST472J	CARBON RESISTOR
R730	1	KA16ST562J	CARBON RESISTOR
R731	1	KA16ST472J	CARBON RESISTOR
MISCELLANEOUS			
CF701	1	K8R-4008	CERAMIC OSCILLATOR UNIT
CF702	1	K8R-455B	CERAMIC OSCILLATOR UNIT
MC701	1	MC02-541	MICRO SOCKET ASS'Y
MC702	1	MK03-545	MICRO SOCKET ASS'Y
MC703	1	MC02-540	MICRO SOCKET ASS'Y
MP602	1	IL-S10PS2T2-EF	CONNECTOR
MP901	1	B9P-SHF-1AA	MICRO PLUG
MP902	1	B7P-SHF-1AA	MICRO PLUG
18E13	31	5E-T05	JUMP WIRE

ALTERNATING CURRENT PCB ASS'Y

REF. NO.	Q'TY	PART NO.	DESCRIPTION
P.C.BOARD			
15E 9	1	AC-696A	PRINTED CIRCUIT BOARD
CAPACITORS			
C810	1	ECQU2A103MN	METALLIZED FILM CAPACITOR
SWITCHES			
S801	1	ESBB215V	POWER SWITCH
MISCELLANEOUS			
FU801	1	FU-521024-GGS	FUSE
15E13	2	23165102-BB-C	FUSE HOLDER

CONTROL & DISPLAY PCB ASS'Y

REF. NO.	Q'TY	PART NO.	DESCRIPTION
P.C.BOARD			
19E 1	1	CSL-697A	PRINTED CIRCUIT BOARD
SEMICONDUCTORS			
IC552	1	LB1412	IC
LD551~568	18	LN350GP-U	LED
LD569~572	4	LN450YP	LED
LD573,574	2	LN250RP-U	LED
LD600	1	SL-1032L	LED
LD601	1	LN250RP-U	LED
LD602	1	LN450YP	LED
LD603	1	LN350GP-U	LED
LD604	1	SLR-34MC5F	LED
LD605	1	SLR-34YC5F	LED
CAPACITORS			
C552	1	S5-50TW1R0M	ELECTROLYTIC CAPACITOR
C554	1	S5-50TW2R2M	ELECTROLYTIC CAPACITOR
C558	1	S5-16TW100M	ELECTROLYTIC CAPACITOR
C560	1	S5-16TW4R7M	ELECTROLYTIC CAPACITOR
RESISTORS			
R552,554, 556,558	4	KA16ST561J	CARBON RESISTOR
R560	1	KA16ST182J	CARBON RESISTOR
R562	1	KA16ST272J	CARBON RESISTOR
R566	1	KA16ST823J	CARBON RESISTOR
R568	1	KA16ST223J	CARBON RESISTOR
R600	1	KA16ST561J	CARBON RESISTOR
SWITCHES			
S600~602	3	SKHHAK	TACT SWITCH
S603~608	6	SKHHBV	TACT SWITCH
MISCELLANEOUS			
3M26	1	N44931	SPACER
FW601	1	468S263807-J-J	3-LEAD, FLAT CABLE
MC601	1	MC03-543	MICRO SOCKET ASS'Y
MC602	1	MK10-546	MICRO SOCKET ASS'Y
RX600	1	BX1387	REMOTE SIGNAL RECEIVING UNIT
20E10,E11	88	5E-T05	JUMP WIRE

DISPLAY DRIVER PCB ASS'Y

REF. NO.	Q'TY	PART NO.	DESCRIPTION
P.C.BOARD			
20E13	1	CT-697A	PRINTED CIRCUIT BOARD
SEMICONDUCTORS			
D601	1	DS442	DIODE
Q601~605	5	RN-1207	TRANSISTOR
Q606	1	2SB621NC-R,S	TRANSISTOR
Q607	1	2SA1048-Y,GR	TRANSISTOR
Q608,609	2	2SC2458-GRBL	TRANSISTOR
IC551	1	LB1412	IC
IC601	1	LM8523	IC
IC602	1	TC9130P	IC
IC603,604	2	TC40118P	IC
ZD601	1	ZD50-035	ZENER DIODE,1/2W,3.5V
CAPACITORS			
C551	1	S5-50TW1R0M	ELECTROLYTIC CAPACITOR
C553	1	S5-50TW2R2M	ELECTROLYTIC CAPACITOR
C557	1	S5-16TW100M	ELECTROLYTIC CAPACITOR
C559,601~ 603	4	S5-16TW4R7M	ELECTROLYTIC CAPACITOR
C604	1	S5-50TWR22M	ELECTROLYTIC CAPACITOR
C605	1	S5-16TW100M	ELECTROLYTIC CAPACITOR
C606~610	5	TP125X103N	CERAMIC CAPACITOR
C611	1	UP125B151K	CERAMIC CAPACITOR
RESISTORS			
R551,553, 555,557	4	KA16ST561J	CARBON RESISTOR
R559	1	KA16ST182J	CARBON RESISTOR
R561	1	KA16ST272J	CARBON RESISTOR
R563	1	KA16ST334J	CARBON RESISTOR
R565	1	KA16ST823J	CARBON RESISTOR
R567	1	KA16ST223J	CARBON RESISTOR
R569,570	2	KA16ST473J	CARBON RESISTOR
R601	1	KA16ST330J	CARBON RESISTOR
R602	1	KA16ST561J	CARBON RESISTOR
R603	1	KA16ST563J	CARBON RESISTOR
R604	1	KA16ST104J	CARBON RESISTOR
R605	1	KA16ST222J	CARBON RESISTOR
R606~610	5	KA16ST103J	CARBON RESISTOR
R611	1	KA16ST472J	CARBON RESISTOR
R612	1	KA16ST103J	CARBON RESISTOR
R613	1	KA16ST473J	CARBON RESISTOR

REF. NO.	Q'TY	PART NO.	DESCRIPTION
R614~618	5	KA16ST104J	CARBON RESISTOR
R619	1	KA16ST103J	CARBON RESISTOR
R620	1	KA16ST335J	CARBON RESISTOR
R621,622	2	KA50XT390J	CARBON RESISTOR
R623	1	KA25ST100J	CARBON RESISTOR
SWITCHES			
S609	1	SSSS2-B	SLIDE SWITCH
MISCELLANEOUS			
FW602	1	468S264B18-J-Z	4-LEAD, FLAT CABLE
MC551	1	MC05-544	MICRO SOCKET ASS'Y
MC603	1	MC03-542	MICRO SOCKET ASS'Y
MP702	1	IL-S03PS2T2-EF	CONNECTOR
22E26	45	5E-T05	JUMP WIRE

EXPLODED VIEW

REF. NO.	Q'TY	PART NO.	DESCRIPTION
COILS			
T901	1	NPT-2304S	POWER TRANSFORMER
SWITCHES			
S901	1	ESE3713	POWER SWITCH
MISCELLANEOUS			
J901	1	S2-737T-100	AC OUTLET
1M 1	1	N21468-1B	FRONT PANEL
1M 3	1	N30961B-1B	DISPLAY GLASS
1M 4	1	N44948-1	CASSETTE GLASS
1M 6	1	N30970A-1B	CASSETTE LID
1M11	1	KN80451-0227	KONB 43 (POTENTIOMETER)
1M14	1	KNB-0450	KONB 25 (POTENTIOMETER)
1M15	2	KN80448-0226	KNOB 18 (POTENTIOMETER)
1M18	2	KNB-0449A	LEVER KNOB
1M21	1	62-1111-1-0	PUSH BUTTON
1M22	1	62-1111-0-0	PUSH BUTTON
1M26	6	N44957-BK	PUSH BUTTON
1M27	1	N44989-RD	PUSH BUTTON
1M28	2	N44956-BK	PUSH BUTTON
1M29	1	N44958-GY	PUSH BUTTON
1W15	1	U9-#03B10	UL TYPE TUBE
2M 1	2	N44882	LED CHIP
2M 4	1	N21471	CABINET
2M 6	1	N21470-1A	REAR PANEL
2M 7	1	N21469	BOTTOM CHASSIS
2M 8	1	N30962	BOTTOM PLATE
2M11	4	NO.7102	FOOT
3M 1	1	N10445A	FRONT BASE
3M 3	2	N44919	JOINT ANGLE
3M 4	1	N44916	FITTINGS TOP (CASSETTE)
3M 5	1	N44917	FITTINGS BOTTOM (CASSETTE)
3M 6	1	N44923	FITTINGS (EJECT)
3M 7	1	N44939A	SLIDE LEVER
3M 8	1	N44915	FITTINGS (POTENTIOMETER)
3M 9	1	N44949	FITTINGS (SWITCH)
3M10	1	N44950	FITTINGS (VOLTAGE SELECTOR)
3M11	1	N44922	FITTINGS (P.C.B.)
3M12	2	N44961	FITTINGS (P.C.B.)
3M13	2	N44963	FITTINGS (P.C.B.)
3M14	1	N42635	FITTINGS (P.C.B.)
3M18	1	N4326B	KNOB SHAFT
3M20	4	NO.1841A	PULLEY
3M22	2	2AB-258	REINFORCEMENT (P.T.)
3M23	8	N44959	KNOB SPRING
3M24	1	N44960	KNOB SPRING
3M25	1	N45008	SPACER
3M27	1	N44990A	INSULATION COVER
3M28	1	N44967-50	CABINET MAT
3M29	1	N44997	SHIELD CUSHION
3M30	1	N44844	CUSHION
4M 3	1	N44043	LABEL, SA1965 (LIGHTNING FLASH)
4M 4	1	N44525	LABEL, FUSE
4M11	1	SL.1024	LABEL, SERIAL NO.
5M 1~M 6	17	TPM+30X08-Y	TAP SCREW P, ROUND HEAD, Y
5M 8,M 9	4	TPM+30X08-B	TAP SCREW P, ROUND HEAD, B
5M13	3	TPS+30X08-Y	TAP SCREW P, FLAT HEAD, Y
5M18,M19	4	TBB+26X05-Y	TAP SCREW B, BIND HEAD, Y
5M23	2	TSB+26X05-B	TAP SCREW S, BIND HEAD, B
5M27~M30	4	TSB+30X06-Y	TAP SCREW S, BIND HEAD, Y
6M 1~M 5	14	TSB+30X06-Y	TAP SCREW S, BIND HEAD, Y
6M11,M12	4	TSB+30X08-N	TAP SCREW S, BIND HEAD, N
6M15	2	TSB+30X14-Y	TAP SCREW S, BIND HEAD, Y
6M18~M22	12	TSB+30X06-B	TAP SCREW S, BIND HEAD, B
6M24	4	TSC+30X06-Y	TAP SCREW S, WASHER FACED, Y
6M26~M28	9	TSC+30X08-Y	TAP SCREW S, WASHER FACED, Y
7M 1	2	TST+40X08-Y	TAP SCREW S, TRUSS, Y
7M 7,M 8	10	TSB+40X08-B	TAP SCREW S, BIND HEAD, B
7M10	6	2AWX0840-05-B	PLAIN WASHER, B
7M12	2	2AWX0830-05-B	PLAIN WASHER, B
7M15~M17	4	TSS+30X08-B	TAP SCREW S, FLAT HEAD, B

REF. NO.	Q'TY	PART NO.	DESCRIPTION
15E17	1	ACC-033D3-4EC1	LINE CORD
15E21	1	SR-4N-4	CORD STOPPER
16E26	1	PAD-2316	CASSETTE MECHANISM
22E22	2	VJR-3	SNAKE LUG
22E25	3	KGLS-10R	SPACER

ACCESSORY

REF. NO.	Q'TY	PART NO.	DESCRIPTION
MISCELLANEOUS			
4M 1	1	OM-609A	INSTRUCTION MANUAL
4M 2	1	N44687	CAUTION SHEET, POLARIZED PLUG
4M 5	1	NAD-WC2A	CARD,WARRANTY REGISTRATION
4M19	1	N40487	POLYETHYLENE BAG (ACCESSORIES)
22E27	1	RC-1001-D	REMOTE CONTROL TRANSMITTER
22E28	1	UM-3-2	BATTERY
22E29	2	PC-046	RCA PIN CORD ASS'Y

PACKING MATERIALS

REF. NO.	Q'TY	PART NO.	DESCRIPTION
MISCELLANEOUS			
4M 6	1	N44894	TAPE,PACKING MATERIAL
4M12	2	SL.1024	LABEL, SERIAL NO.
4M16	1	N21482	SHIPPING CARTON
4M18	1	N41318-1	POLYETHYLENE BAG
4M20	1	N45000	PACKING PAD
4M21	1	N21484A-R	PACKING PAD R
4M22	1	N21484A-L	PACKING PAD L

P.C.BOARD ASS'Y

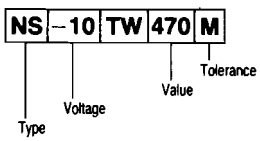
REF. NO.	Q'TY	PART NO.	DESCRIPTION
13P27	1	50D1P01A-1	MAIN PCB ASS'Y
13P28	1	50D1P01A-3	MPX SWITCH PCB ASS'Y
13P29	1	50D1P01A-2	REC. & BALANCE PCB ASS'Y
14P 1	1	50D1P02A-1	POWER SUPPLY PCB ASS'Y
15P 9	1	50D1P02A-3	ALTERNATING CURRENT PCB ASS'Y
16P 1	1	50D1P02A-2	MECHA. CONTROL PCB ASS'Y
19P 1	1	50D1P03A-1	CONTROL & DISPLAY PCB ASS'Y
20P13	1	50D1P03A-2	DISPLAY DRIVER PCB ASS'Y

Classify Parts by Destinations

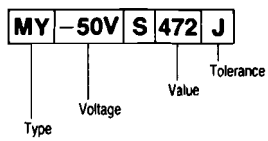
Ref. No.	Description	U.S.A. A-TYPE	CANADA A_1-TYPE	U.K. B-TYPE	AUSTRALIA/N.Z. B_1-TYPE	SCANDINAVIA C-TYPE	W.GERMANY C_1-TYPE
C801	ELECTROLYTIC CAPACITOR	NS-25TW222M-KF	S16-35TW222MKF	NS-25TW222M-KF	NS-25TW222M-KF	NS-25TW222M-KF	NS-25TW222M-KF
C810	METALLIZED FILM CAPACITOR	ECQU2A103MN	ECQU2A103MN	ECQU2A103MF	ECQU2A103MF	ECQU2A103MF	ECQU2A103MF
J901	AC OUTLET	S2-737T-100	S2-737T-100	S2-729T-100	S2-739T-100	S2-729T-100	S2-729T-100
T901	POWER TRANSFORMER	NPT-2304S	NPT-2304S	NPT-2305S	NPT-2305S	NPT-2305S	NPT-2305S
FU801	FUSE	FU-521024-GGS	FU-521024-GGS	FU-528017T	FU-528017T	FU-528017T	FU-528017T
FU802	FUSE	FU-521024-GGS	FU-521024-GGS	FU-525017T	FU-525017T	FU-525017T	FU-525017T
FU803	FUSE	FU-521024-GGS	FU-521024-GGS	FU-525017T	FU-525017T	FU-525017T	FU-525017T
FU804	FUSE	FU-512024-GGS	FU-512024-GGS	FU-521627T	FU-521627T	FU-521627T	FU-521627T
15E17	Line Cord	ACC-033D3-4EC1	ACC-041D3-4EC1	ACC-013D3-4EC4	ACC-030D3-4EC1	ACC-005D3-4EC1	ACC-005D3-4EC1
15E21	Cord Stopper	SR-4N-4	SR-4N-4	SR-5N-4	SR-4N-4	SR-4N-4	SR-4N-4
13P27	MAIN PCB ASS'Y	50D1P01A-1	50D1P01F-1	50D1P01B-1	50D1P01D-1	50D1P01C-1	50D1P01E-1
13P28	MPX SWITCH PCB ASS'Y	50D1P01A-3	50D1P01F-3	50D1P01B-3	50D1P01D-3	50D1P01C-3	50D1P01E-3
13P29	REC. & BALANCE PCB ASS'Y	50D1P01A-2	50D1P01F-2	50D1P01B-2	50D1P01D-2	50D1P01C-2	50D1P01E-2
14P 1	POWER SUPPLY PCB ASS'Y	50D1P02A-1	50D1P02F-1	50D1P02B-1	50D1P02D-1	50D1P02C-1	50D1P02E-1
15P 9	ALTERNATING CURRENT PCB ASS'Y	50D1P02A-3	50D1P02F-3	50D1P02B-3	50D1P02D-3	50D1P02C-3	50D1P02E-3
16P 1	MECHA. CONTROL PCB ASS'Y	50D1P02A-2	50D1P02F-2	50D1P02B-2	50D1P02D-2	50D1P02C-2	50D1P02E-2
19P 1	CONTROL & DISPLAY PCB ASS'Y	50D1P03A-1	50D1P03F-1	50D1P03B-1	50D1P03D-1	50D1P03C-1	50D1P03E-1
20P13	DISPLAY DRIVER PCB ASS'Y	50D1P03A-2	50D1P03F-2	50D1P03B-2	50D1P03D-2	50D1P03C-2	50D1P03E-2
2M 6	Rear Panel	N21470-1A	N21470-1A	N21475-1	N21500-1	N21475-2	N21475-2
3M27	INSULATION COVER	N44990A	N44990A	N44993A	N44993A	N44993A	N44993A
4M 2	CAUTION SHEET, POLARIZED PLUG	N44687	N44687	Nil	Nil	Nil	Nil
4M 3	LABEL, SA1965(LIGHTNING FLASH)	N44043-1	N44043-1	Nil	Nil	Nil	Nil
4M 4	LABEL, FUSE	N44525	N44525	Nil	Nil	Nil	Nil
4M 5	CARD, WARRANTY REGISTRATION	NAD-WC2A	Nil	Nil	Nil	Nil	Nil
4M18	Polyethylene Bag	N41318-1	N41318-1	N44660	N41318-1	N41318-1	N41318-1
4M26	STICKER, WARNING	Nil	Nil	N41994	Nil	Nil	Nil

Capacitors Description

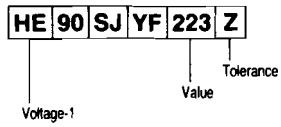
- **Electrolytic**

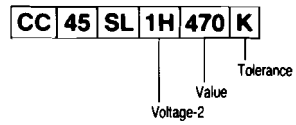


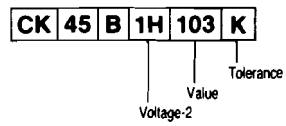
- **Mylar · Styrol**



- **Ceramic**







- **Electrolytic**

Type	Voltage	Value	Tolerance
LL: Low Leak	−10: 10V	R47: 0.47μF	K: ±10%
NP: Non-Pole	−50: 50V	4R7: 4.7μF	M: ±20%
NS: Standard	6R3: 6.3V	470: 47μF	
		471: 470μF	
		472: 4700μF	

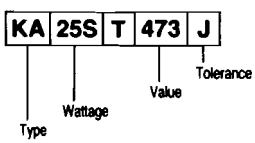
- **Mylar · Styrol**

Type	Voltage	Value	Tolerance
MY: Mylar	−25V: 25V	4R7: 4.7pF	G: ±2%
ST: Styrol	125V: 125V	470: 47pF	J: ±5%
	−63T: 63V	471: 470pF	K: ±10%
		472: 4700pF	M: ±20%
		473: 0.047μF	
		474: 0.47μF	
		(1000pF=0.001μF)	

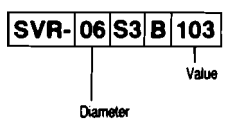
Voltage-1	Voltage-2	Value	Tolerance
HC: 25V	1E: 25V	4R7: 4.7pF	C: ±0.25pF
HE: 50V	1H: 50V	470: 47pF	D: ±0.5pF
H: 100V	2H: 500V	471: 470pF	F: ±1pF
HK: 250V		472: 4700pF	J: ±5%
HM: 500V		473: 0.047μF	K: ±10%
		474: 0.47μF	M: ±20%
		(1000pF=0.001μF)	Z: +80~−20%

Resistors Description

- **Fixed**

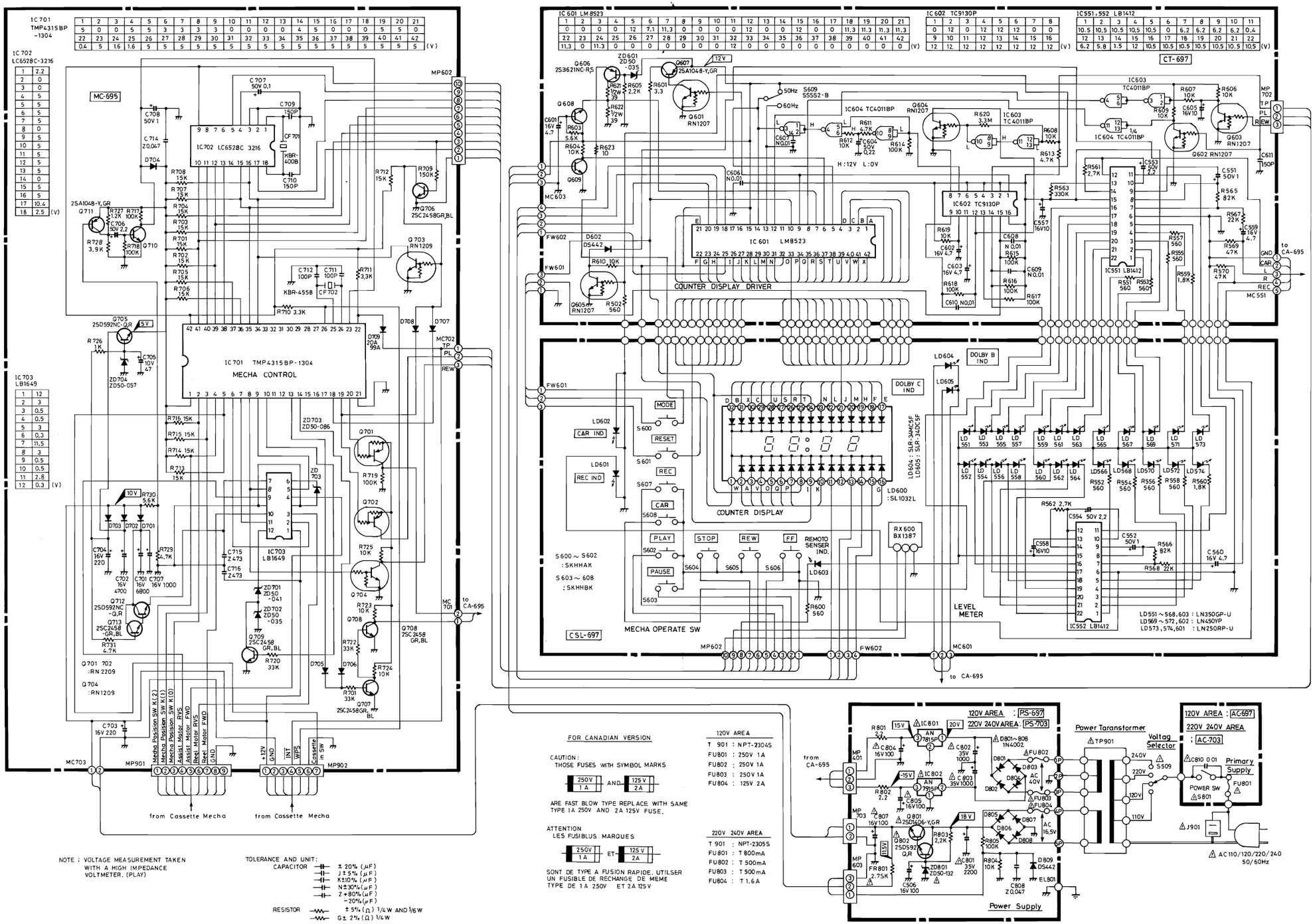


- **Semi-Variable**



Type	Wattage	Value	Tolerance	Diameter
CE: Cement Case	−2W: 2W	R47: 0.47Ω	M: ±20%	08: 8φ
FR: Flame Proof	10W: 10W	4R7: 4.7Ω	K: ±10%	10: 10φ
KA: Carbon	16S: 1/6W	470: 47Ω	J: ±5%	06: 6φ
MF: Metal Film	20S: 1/5W	471: 470Ω	G: ±2%	
RF: Fusible	25S: 1/4W	472: 4.7kΩ	F: ±1%	
SA: Metal Oxide	50S: 1/2W	473: 47kΩ	D: ±0.5%	
	50X: 1/2W	474: 470kΩ		
	S3W: 3W	475: 4.7MΩ		

SCHEMATIC DIAGRAM



NOTE : VOLTAGE MEASUREMENT TAKEN WITH A HIGH IMPEDANCE VOLTMETER. (PLAY)

TOLERANCE AND UNIT:
CAPACITOR ± 20% (μF)
J ± 5% (μF)
K ±10% (μF)
N ±30% (μF)
Z +80% -20% (μF)
RESISTOR ± 5% (Ω) 1/4W AND 1/6W
G ± 2% (Ω) 1/4W

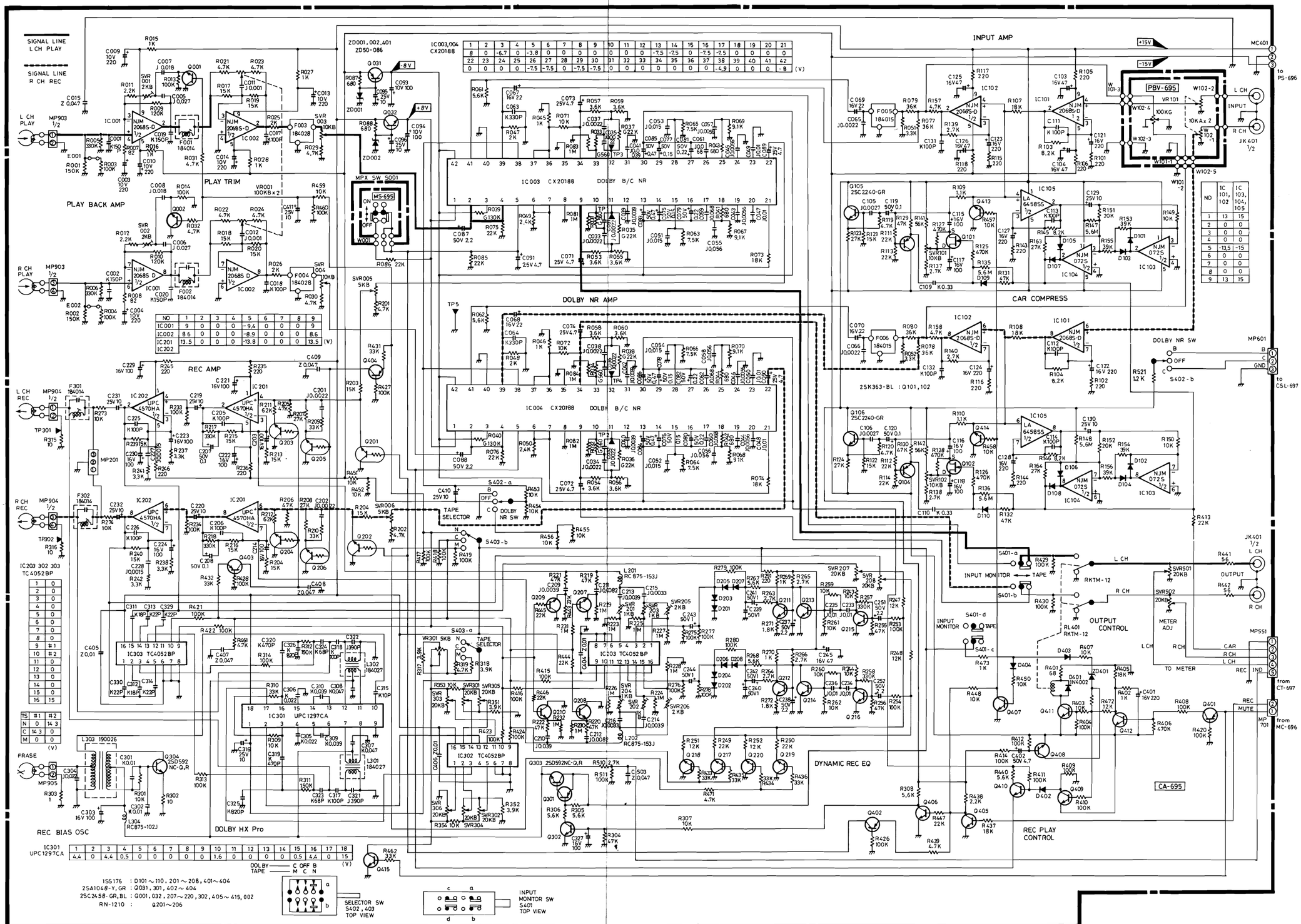
FOR CANADIAN VERSION

CAUTION:
THOSE FUSES WITH SYMBOL MARKS
250V 1A AND 125V 2A
ARE FAST BLOW TYPE REPLACE WITH SAME TYPE 1A 250V AND 2A 125V FUSE.

ATTENTION
LES FUSIBLUS MARQUES
250V 1A ET 125V 2A
SONT DE TYPE A FUSION RAPIDE. UTILISER UN FUSIBLE DE RECHANGE DE MEME TYPE DE 1A 250V ET 2A 125V

120V AREA
T 901 : NPT-2304S
FU801 : 250V 1A
FU802 : 250V 1A
FU803 : 250V 1A
FU804 : 125V 2A

220V 240V AREA
T 901 : NPT-2305S
FU801 : T 800mA
FU802 : T 500mA
FU803 : T 500mA
FU804 : T 1.6A


SIGNAL LINE
L CH PLAY
SIGNAL LINE
R CH REC
PLAY BACK AMP
PLAY TRIM
REC AMP
DOLBY NR AMP
INPUT AMP
CAR COMPRESS
DOLBY NR SW
OUTPUT CONTROL
REC PLAY CONTROL
DYNAMIC REC EQ
DOLBY HX Pro
REC BIAS OSC
MPX SW S001
TAPE SELECTOR
INPUT MONITOR SW
SELECTOR SW
TOP VIEW
PBV-695
CA-695
ZD001, 002, 401
ZD50-086
IC003, 004
CX20188
DOLBY B/C NR
IC203 302 303
TC4052BP
IC301
UPC1297CA
ISS176 : D101 ~ 110, 201 ~ 208, 401 ~ 404
2SA1048-Y, GR : Q031, 301, 402 ~ 404
2SC2458-GR, BL : Q001, 032, 207 ~ 220, 302, 405 ~ 415, 002
RN-1210 : Q201 ~ 206
2SK363-BL : Q101, 102
to PS-696
to CSL-697
from CT-697
from MC-696
MP 701
L CH
R CH
INPUT
OUTPUT
TO METER
REC
MUTE
CAR
MONITOR
TAPE

SERVICE MANUAL

6300

CASSETTE DECK

NAD ELECTRONICS

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